

VOL. VIII

NEW SERIES .

No. 11

NOVEMBER, 1899

Biological
& Medical
Serials

THE

OPHTHALMIC RECORD

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EDITORIAL SECRETARY,

103 E. ADAMS STREET, CHICAGO, ILLS.

PUBLISHED ON THE FIFTEENTH OF THE MONTH

SUBSCRIPTION RATES: IN THE UNITED STATES, CANADA AND MEXICO, \$3.00
PER ANNUM, IN ADVANCE. OTHER COUNTRIES OF THE
POSTAL UNION, 14 SHILLINGS

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THE HIGH BUILDING, CHICAGO, U. S. A.

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The December number of the OPTHALMIC RECORD will contain, amongst others, an original article by Swan M. Burnett, M.D., A Case of Obstructed Retinal Circulation, with a series of pictures showing the changes in the vascular system during its re-establishment and the formation of new vessels in the retina; one by R. S. Pattillo, M.D., Amaurosis Following Methyl Alcohol Intoxication; one by Casey A. Wood, M.D., Amblyopia from Santonin Poisoning. There will also appear editorials, reviews, society reports and items of interest to the profession.

The RECORD particularly desires short practical papers on any subject connected with Ophthalmology. These will be published at as early a date as possible. It is understood that, unless otherwise arranged, original articles when accepted are contributed to the RECORD exclusively. Illustrative cuts will be made at the expense of the journal, and proofs for correction will be sent to authors when desired. Reprints with covers are furnished at cost. One hundred of these will be presented to authors *gratis* when a request for them is written on the original manuscript. The RECORD will be issued monthly, and each number will contain about 54 pages of reading matter.

Address all communications relating to Editorial Department to
T. A. WOODRUFF, M.D., Editorial Secretary,
103 E. Adams Street, Chicago.

Subscriptions and advertisements should be sent to the publisher,
The High Bldg., Chicago, Ill., U. S. A.

Sole Subscription Agents for Great Britain, J. RAPHAEL & Co.,
51 Clerkenwell Road, London, E. C.

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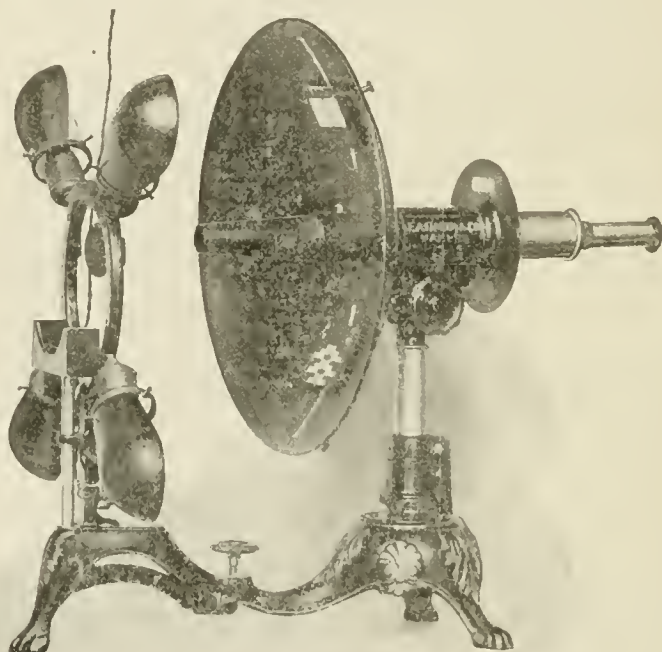
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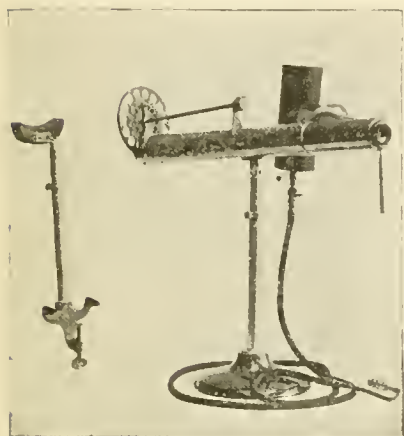


Illustration A,
with base complete

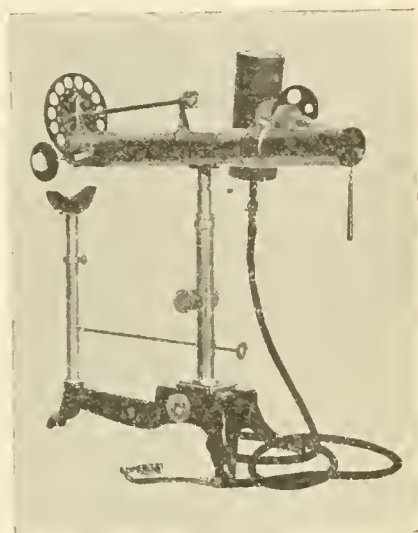


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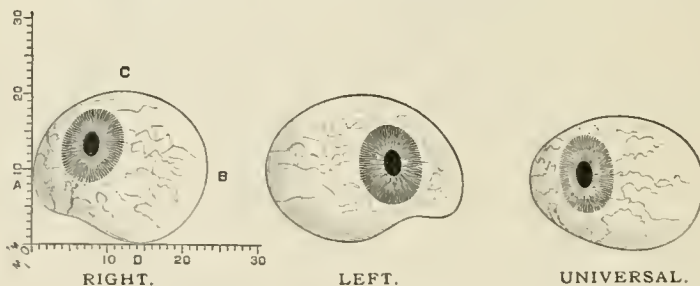
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THE OPHTHALMIC RECORD

*A MONTHLY REVIEW OF THE PROGRESS OF
OPHTHALMOLOGY.*

VOLUME VIII.

CHICAGO, NOVEMBER, 1899.

NO. 11. NEW SERIES

ORIGINAL ARTICLES.

TWO NEW ASTIGMATIC CHARTS.

BY FREDERICK HERMAN VERHOEFF, PH.B., M.D.

BALTIMORE.

Illustrated.

The two charts that I wish to describe are identical in principle, but differ somewhat in detail, one being designed to determine the axis, while the other is to be used for estimating more especially the amount of astigmatism. The principle upon which the charts are constructed is best illustrated in the latter, Fig. 1. This consists of a disk pivoted through its center to a flat board upon which degrees are marked off so that the disk can be rotated any number of degrees desired. Lines are drawn upon the disk as illustrated in the diagram; the two wide lines at right angles to each other are to be compared by the patient, the disk having been so rotated that one of these lines corresponds to the axis of astigmatism.

It is evident that if one of the wide lines appears more distinct to the astigmatic patient, the fine lines at right angles to it will appear blurred, while at the same time the fine lines at the right angles to the less distinct of the two wide lines will appear comparatively sharp. In this way the apparent difference in distinctiveness between the two wide lines is increased, since the sharp line is made to appear still sharper by contrast with its more or less uniformly blurred background, and the blurred line appears still more blurred because of the fine lines at right angles to it

having become distinct. In effect, it seems as if the blurred wide line were hidden behind the sharp fine lines.

Another advantage of the fine lines is due to the fact that while they exaggerate the apparent difference in distinctness between the two wide lines, they also decrease the total amount of light reflected from the chart, thus rendering the latter less fatiguing to the eyes. The fine lines are an additional advantage in that astigmatism of low grade may be estimated by having the patient confine his attention to them and ascertaining which pair of quadrants are the more distinct. In this way, too,

FIG. 1.

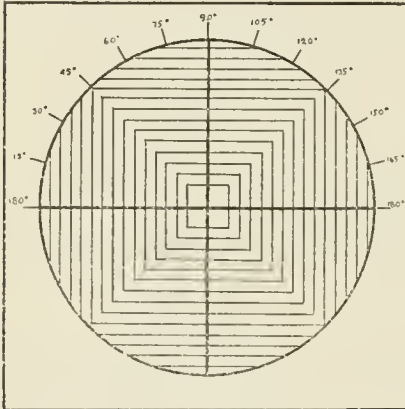
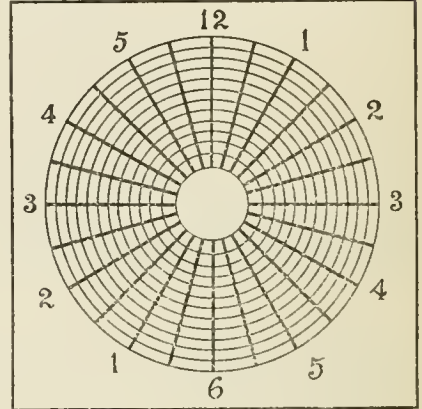


FIG. 2.



after the amount of astigmatism has been determined by the aid of the wide lines, it may be confirmed by the fine lines.

The chart for determining the axis of astigmatism, Fig. 2, requires little explanation. The circumferences here produce much the same effect as the fine lines in the other chart. In labeling the lines, I prefer very large Arabic numerals placed opposite alternate lines as shown in the diagram. This renders it easy for the patient to read the numbers even when they are very much blurred.

The axis of astigmatism may also be determined by the chart first described. This is done by suitably blurring the lines by means of a convex lens or its equivalent, and then rotating the disk back and forth until the more distinct of the two wide lines reaches a position at which it appears most distinct to the patient. Another method is to rotate the disk until the two lines appear equally distinct. The axis will then lie half way between the two lines. Both of these methods are often very

accurate and should never be omitted, at least as confirmatory tests. The latter method, so far as I know, has not previously been described.

It is a mistake, I think, to make the lines on astigmatic charts so narrow as to subtend the visual angle of 1' as Green* and later, Wallace† have done. Green gave no reason for doing this, while Wallace did so simply because he thought the lines should be made upon the same principle as test letters. Test lines, however, are used in a different way from test letters and I cannot see how any relation can be established between them. The object to be attained in charts is to have the lines so constructed that for a given amount of astigmatism there will be the greatest possible apparent difference in distinctness between them. Moreover, this difference in distinctness must be due as far as possible to astigmatism alone.

It seems to me that the width of lines must be decided upon for the most part by experimentation, but provided that slight differences in distinctness can still be made out in them, the wider the lines are the better, since wide lines when blurred do not show the effect of positive or negative aberration so markedly as narrow lines. A not unimportant objection to the use of narrow lines, lies in the fact that when they are blurred to an extent sufficient to place them surely out of reach of the accommodation, all become so indistinct as to render it impossible for the patient to recognize any differences among them when the astigmatism is of low grade or is partially corrected. Where a cycloplegic is used, this objection, of course, does not apply.

On the other hand, if the lines are too wide, it is equally difficult to judge of the variations in distinctness due to low grades of astigmatism. To get the maximum effect, the lines should be varied in width according to the amount of astigmatism, but practically, of course, it is only necessary to construct lines suitable for low grades of astigmatism, since high grades produce sufficient apparent differences no matter what the width of the lines.

In most astigmatic charts the test lines consist of three stripes. This I consider disadvantageous for the stripes are so close together that the blur from one stripe may at times reinforce, as it were, the blur from the others, thus giving an appearance of distinctness which may be very deceptive when it comes to estimating the relative distinctness of the lines on the chart. It is for this reason that I have placed the fine lines on the charts so far apart.

*Transactions American Ophthalmological Society, 1869, page 131.

†University Medical Magazine, Philadelphia, 1889-90, II, 13-15.

In the two charts described above, I have adopted the following measurements: Width of wide lines, 3.75 mm.; width of narrow lines, 1.1 mm.; distance between narrow lines, 6.5 mm.; diameter of disk, 31 cm. The chart for determining the axis of astigmatism should be as large as it conveniently can be made. The charts are to be viewed at twenty feet, the usual distance.

These charts may be obtained from E. B. Meyrowitz, New York.
1707 Fairmount Avenue, Baltimore, Md.

THE REPORT OF A CASE OF KERATECTOMY.

BY CHARLES W. KOLLOCK, M.D.

CHARLESTON, S. C.

In March of the present year a dark-colored mulatto woman consulted me about a troublesome protrusion on the left cornea. It occupied the upper inner portion and extended from the cornea-scleral border down and out below the pupillary area. The eye was painful and irritable, the latter condition being probably due to the protrusion of the ectasia between the lids. An iridectomy was first performed to relieve the tension, which was slightly increased, and considerable pressure was made with a roller bandage and compress for the purpose of forcing back the bulging cornea. Nothing was accomplished by this treatment. It was then decided to excise a portion of the staphyloma so that when the edges should be brought together, the general corneal area would be but little if any reduced. This was done and about a millimeter of the protruding part was left above the base. The iris was torn away with the excised corneal tissue and the lens also came out. The edges of the opening were brought together with silk sutures and the whole reënforged and protected by drawing the conjunctiva, which had been dissected for four or five millimeters from the corneal border, over the entire cornea and uniting it with the purse-string suture as advised by De Wecker in treating extensive wounds of the cornea. Healing was without complication, the conjunctival suture cut through at the end of the week and this coat retracted to its normal position. The corneal wound was thoroughly united and the contour of the cornea was the same as that of the sclera. The corneal area had not been much diminished, the ball was of course less prominent, but by no means unsightly, and was free from irritation and pain. There has been no tendency to bulging at any point since the operation.

The chief objection to operations of this kind has been that the sutures were placed in or near the ciliary region and caused either a cyclitis or sympathetic inflammation of the fellow eye, or both. In order that these dangers may be obviated the sutures should be placed entirely in the corneal tissue, and even in cases where the entire cornea is involved in the protrusion a sufficient space should be left for the sutures which not only insure safety from ciliary inflammation, but also leaves a more sightly globe. The cornea is always stretched in these cases and a considerable portion may be excised and yet enough left to make the area about the same as before. Protecting and reinforcing by the conjunctiva is also of undoubted advantage.

EMPHYSEMA OF LIDS FOLLOWING FRACTURE OF THE INNER WALL OF THE ORBIT FROM A FIST BLOW.*

WENDELL REBER, M.D.

PHILADELPHIA, U. S. A.

Illustrated.

Fracture of the walls of the orbit may be either direct or indirect, and may be caused by blows or falls upon the head or face, and by gunshot or other penetrating wounds of the orbit with or without the lodgment of a foreign body. Fractures of the inner wall of the orbit may occur alone or in connection with fracture of the other walls. If the diagnosis of direct fracture cannot be made by determining displacement of the lacrimal bone from the orbital plane of the ethmoid, much light will be thrown on the diagnosis by the appearance of hemorrhage from the nose and emphysema of the lids or anterior orbital tissues. Such conditions, however, are usually due to blows of no little violence, and are generally easy of detection.

The two histories here recited are therefore of some interest, in that fracture of the inner orbital wall was directly caused by a fist blow, in that there was no complication, and in that the emphysema was limited to the lids.

CASE I.—Q. M. D., aet. 26, colored, a waiter by occupation, came to the Polyclinic Hospital April 19, 1898, stating that the previous evening, while scuffling with a friend, he was struck a pretty sound blow in the right eye. He thought nothing of it at the time, and applied cold water

*Presented to the Northwestern Medical Society of Philadelphia, Tuesday, March 7, 1899.

liberally, but two or three hours later, just before going to bed, he noticed blood trickling from his right nostril, and he blew his nose, whereupon the lids of the right eye immediately snapped shut and puffed out. He came under observation the middle of the next day, when the left eye was found normal in all respects. The lids of the right eye were tense, swollen, and so tightly closed that some effort with the fingers was necessary to expose the eyeball, which was intact. Vision was $\frac{5}{6}$ in both eyes. There was no pain, either spontaneous or on pressure, save directly over the inner canthus. The feeling of crepitation so characteristic of emphysema could be elicited all over the distended lids, but there was no anesthesia anywhere in the area of distribution of the inferior maxillary division of the fifth nerve. A small deposit of effused blood showed under the skin near the inner canthal end of the lower lid.

The treatment consisted of a firm pressure bandage and strict injunctions not to blow the nose. When the bandage was removed four days later there was not even a trace of the emphysema, nor was there any recurrence of the condition later on.

CASE 2.—A. C., aet. 21, single, a molder, came to the Polyclinic Hospital February 23, 1899, saying that three hours before he had an altercation with some roughs who had been making him the target for loaded snow balls. During the fistic encounter he was struck from behind by one of his assailants, who reached around the left side of his head and "landed heavily on his left eye." Cold water, arnica and witch hazel were applied to the parts for an hour or so when, as in the preceding case, the trickling of blood from the left nostril induced the patient to blow his nose, whereupon the lids of the left eye closed with a snap, and he found that he couldn't voluntarily open the eye.

In great alarm, he presented himself at the hospital, with a sound right eye and terrific distension of the lids on the left side. Crepitus was everywhere noted over the distended area, but pain was not complained of except when pressure was made over the inner canthus. There was no escape of blood under the skin, and careful examination of the whole orbital rim showed it to be intact; neither was there any depression of any of the facial bones, or any anesthesia in the area presided over by the infraorbital branch of the fifth nerve. Forcible exposure of the globe revealed a sound eye with vision of $\frac{5}{5}$ and a normal eyeground. Half an hour later the emphysema had somewhat subsided, and I requested the patient to again blow his nose, to which he demurred; but when I reassured him that the tension of the lids so produced could soon be

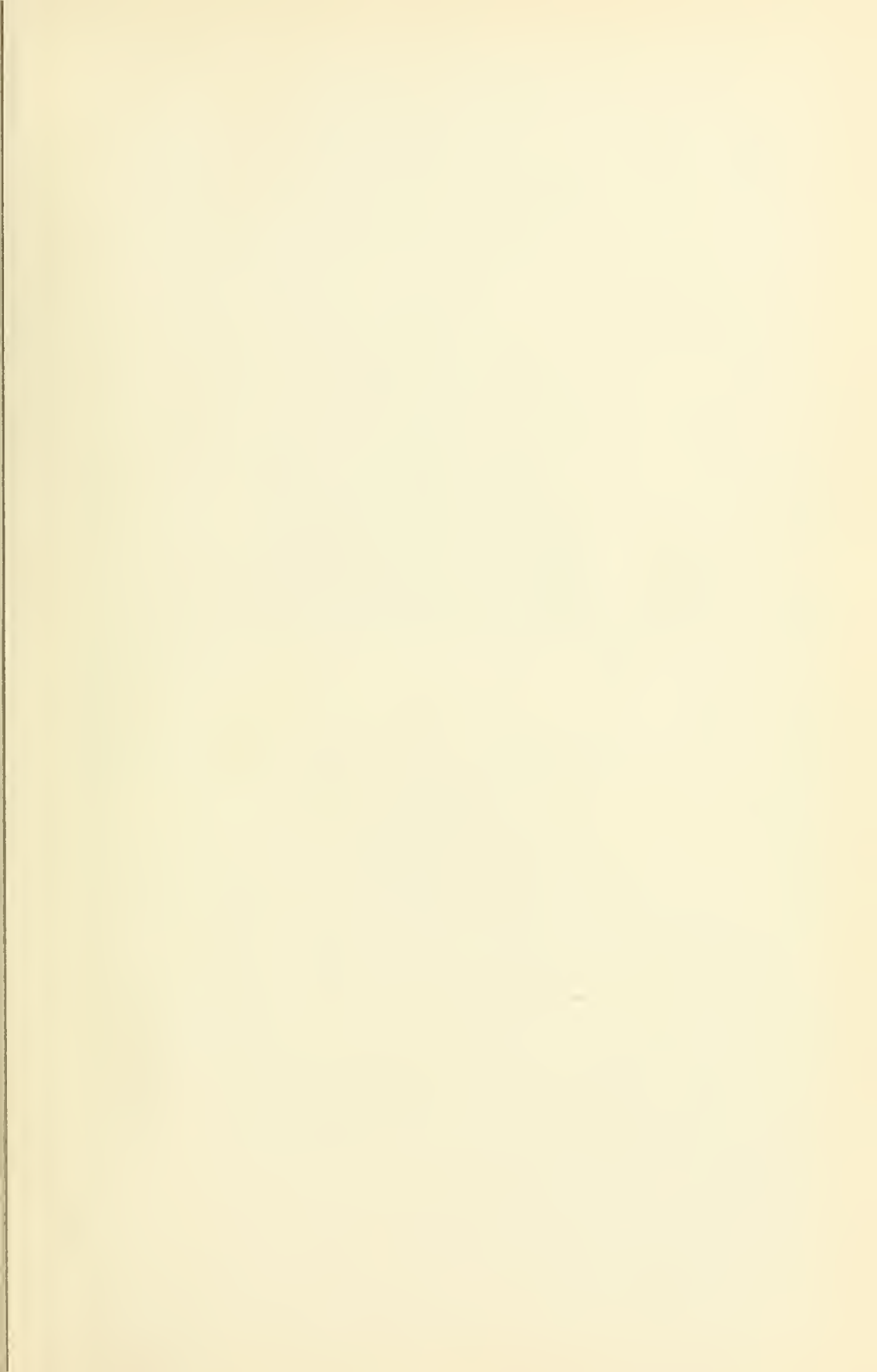




Fig 1

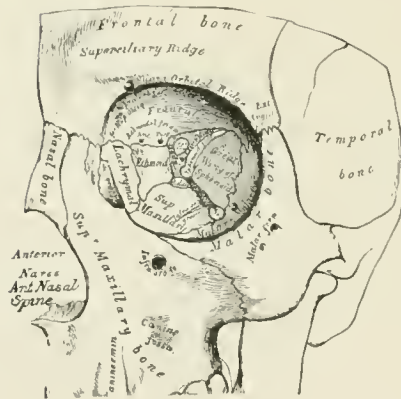


Fig. 11.

dispelled, he blew a loud long blast, filling his left eyelids out as tight as a drumhead, and I had him photographed at that moment. (Fig. 1.)

As in case No. 1, the treatment consisted in a pressure bandage and no nose blowing, and in three days no inflation of the lids could be produced by the most vigorous attempts at blowing the nose.

It will have been observed that the symptoms were practically identical in these two cases. The presence of nose bleed and strictly localized emphysema, the absence of any complicating fracture, the absence of pain on deep pressure everywhere except directly over the internal canthus, the absence of any break in the orbital margin, and of anesthesia in the province of the infraorbital branch of the fifth nerve, all point to a fracture of the inner wall of the orbit involving either the lacrimal bone alone or producing separation of the lacrimal bone from the orbital plate of the ethmoid bone.

Reference to Fig. 2 (or careful examination of inner orbital walls of a perfectly dried and bleached cranium), will show that only at one of these two points would fracture from a fist blow be likely to occur, and the symptom complex presented by the two above cases be entirely and satisfactorily explained. Such conditions following upon fist blows are doubtless of greater or less frequency, but they are seldom considered of sufficient scientific interest to justify report of them.

1208 Spruce Street.

INTRAOCCULAR HEMORRHAGE FOLLOWING CATARACT EXTRACTION, WITH RECOVERY OF USEFUL VISION.

BY JAMES MOORES BALL, M.D.

ST. LOUIS.

Professor of Ophthalmology in St. Louis College of Physicians and Surgeons, Oculist to the St. Louis City Hospital, the Jefferson Hospital and St. Joseph's Sanitorium.

Intraocular hemorrhage following cataract extraction is a serious, but fortunately, rare condition. I have had one case of profuse hemorrhage which came on four hours after the extraction, and caused loss of the eye. The case which I wish to report to-day is as follows:

Mrs. C. B., widow, German, aet. 64, was sent to me by Dr. James A. Close, of St. Louis, on November 14, 1898. Patient has a mature cataract in right eye and an unripe lens in left eye. A preliminary iridectomy was made November 19th on right eye. The eye did well, and on March 1, 1899, I extracted the lens under chloroform anæsthesia. It

548 PIECE OF GRANITE IN POSTERIOR CHAMBER.

was thought best to employ a general anesthetic on account of the nervous condition of the patient.

The patient did well, and on the fifth day was able to count fingers at six feet. The evening of the fifth day the patient became very much excited during a conversation with relatives concerning money matters. During the night she was awakened by a violent pain in the operated eye. This pain continued for two hours. I was not informed of her condition until the next morning. The eye was red, painful, and the anterior chamber filled with blood. Small amount of blood from the conjunctival vessels near the wound had soiled the dressings. Light perception was lost. I felt that the condition was a most serious one, and gave an unfavorable prognosis. The patient was kept under sedative and alterative treatment by her family physician. Atropine was used locally and the eye bandaged. Absorption of blood took place slowly, and light perception returned. An examination made several weeks after the occurrence of the hemorrhage showed a thickened posterior capsule, normal fundus reflex, and vision equal to ability to count fingers at one foot. Vision continued to improve, and on June 11th the posterior capsule was cut with the knife needle. June 19, 1899, glasses were ordered: R. E. = + 11.00 $\bigcirc$ + 2.00 axis 180°. With these, vision = 15/40. With proper lens the patient is able to read Jaeger No. 5.

The hemorrhage in this case came from the corneo-scleral region. That it was due to increased action of the heart, stimulated by excitement, is my belief. It shows that complete recovery can follow a serious bleeding into the eye, and nullifies the teaching of a recently published text-book on ophthalmology, whose author advises that in intraocular hemorrhage the wound be opened and the eye flushed with bichloride solution.

3509¹/₂ Franklin Ave.

PIECE OF GRANITE IN POSTERIOR CHAMBER, FOURTEEN DAYS: INTENSE PAIN, AND SEVERE INFLAMMATION: WITH SCANTY DISCHARGE OF PUS: ENUCLEATION.

BY C. C. STEPHENSON, M.D.

LITTLE ROCK, ARK.

June the 7th last, Joseph W., age about 30, laborer, while working in a granite quarry, some twenty miles west of this city, was struck in his left eye by a piece of flying granite, which was liberated and sent through the air at a terrific speed, by a powerful blow struck with an iron

maul by a fellow laborer. Loss of vision resulted at once, followed by excruciating pain. His companions, after examining him, went to their camp and prepared the usual "Tea leaf poultice," and applied to the wounded eye, and concluded to send him to an oculist the next day. Late in the afternoon, June 8th, about thirty-six hours after receipt of injury, he was brought to my office for examination and treatment.

Examination revealed an incised wound across the cornea, directly over the pupil, and running in a horizontal direction, beginning in the sclerotic, about two mm. from the limbus, on the outer side, and ending one mm. from the limbus, in the cornea. The anterior chamber was filled with blood and clots, which caused some gaping of wound. All conjunctival vessels were congested, and photophobia was present in a marked degree. The eye was cocainized, and an unsuccessful effort was made to remove the foreign body, and clear out the clots; not enough, however, could be removed to admit of an examination with the ophthalmoscope. The patient was of the opinion that there was no foreign body in his eye, which fact may account in a measure for his waiting so long (thirty-six hours) before consulting an oculist. His eye was made as near aseptic as possible, and a six-grain solution of atropia, combined with a ten-grain solution of boric acid, was instilled. He was directed to repeat this every six hours, and to use enough of a four per cent solution of cocaine to make the eye comfortable. An unfavorable opinion was given, and enucleation suggested, if favorable symptoms failed to present in proper time. He objected to this violently and protested against any radical procedure. Twice daily he visited the office till the thirteenth day, and although the inflammatory action was severe (panophthalmitis), and his sufferings intense and continuous only when relieved by one to two teaspoonful doses of papine (Battle & Co.) which I had to begin giving him on second day after his arrival, still there was practically no pus discharging from wound, which was as yet ununited, although there was a constant oozing of the aqueous, which (I failed to mention) began at once, after reception of injury. I advised and insisted on an enucleation on fourth day, but could not obtain his permission to operate.

His treatment throughout was atropia, boric acid, cocaine, with some bi-chlor. occasionally, instilled in a 1-5000 solution, cold applications and eye bandaged and papine sufficient to relieve pain. He persistently refused to part with his eye till the fourteenth day, when pain became so unbearable he told me, if I still thought the piece of rock was in his eye, he wished I would take it out. Accordingly Dr. W. H. Miller was requested to administer chloroform, and the patient was anesthetized, and

the eye enucleated without trouble, except, I might mention, a partial collapse, occasioned by escape of vitreous through unhealed wound. The eye was opened, and a thin, flat piece of stone, about the size of an ordinary finger nail, and weighing probably fifteen grains, was found sticking tightly in the tunics. Large areas of the discolored membrane was plain, but no pus—only the slightest amount in edge of wound—could be found. I forgot to say, a severe iritis was present from the third day. A rapid recovery followed, with no untoward symptoms.

The point worthy of notice in this case was, the severe inflammatory action, accompanied by the most excruciating pain, and yet: only the slightest amount of pus visible. I am aware of the continued tolerance of foreign bodies in the eyes for years, but I am unable to find any record of a foreign body in the eye, with such decided pain and inflammation, without some suppuration: more than in this case, which I am sure would not equal three drops all told. Wilde reports a case that carried a piece of stone in the eye fourteen years, which he removed. Taylor (1878) in *Virginia Medical Monthly*, reports the removal of a piece of bone from the eye, which had remained quiescent fourteen years. Williams in 1881 records in the *Boston Medical and Surgical Journal* the continued toleration of foreign bodies in the eyes, from fifteen to twenty-two years. Critchett (Paris) relates an instance of a foreign body lying loose in the anterior chamber for fifteen years. While Rider (1872), in the transactions of the Medical Society of the State of New York, reports the retention of a piece of percussion cap back of the inner ciliary margin of the iris for thirty-five years. Bartholinus, Jacob, Lowe, Clark, Trionen and Smyley, all report similar instances. Snell, however, gives an account of a piece of steel, which was imbedded close to the optic disc with retention of sight, and was plainly visible with the ophthalmoscope eighteen months after reception of injury. (See report of Royal Ophthalmic Hospital, London, page ix, part iii.) While the above reports tend to show an indefinite degree of toleration of foreign bodies in the eyes, still we are left somewhat in the dark concerning the formation and discharge of pus (if any) in these cases.

I confidently expected more pus than was present, and was surprised at the scanty supply, when considered in connection with the outlined manifestations as given.

Masonic Temple.

A CASE OF ONE-SIDED ALBUMINURIC RETINITIS.

L. W. DEAN, M.S., M.D.

Professor Physiology University of Iowa and Ophthalmic Surgeon, Iowa College for the Blind.
IOWA CITY, IOWA.

On May 16, 1899, Miss S—— consulted me about her eyes. The history of the case is as follows: Patient's age is 20. Father and mother still living; one sister older than herself still in good health. She has had no other brothers or sisters. The patient said that about five weeks before she began to lose the sight in her left eye she did not pay very much attention to it until several days before, when on closing the right eye she discovered she was blind in her left. Her right eye has never bothered her. During childhood she had the ordinary infectious diseases, measles, scarlet fever and whooping cough; so far as she knows she has had no nephritic trouble with any of these. During the last ten years her health had been perfect up to six weeks before. Then she noticed occasional headaches, which she had never had before; she now complains of severe headaches and general weakness. There is no history of swollen feet or œdema of the eyelids.

The patient was five feet five inches tall. Weight 125 pounds. The body was well nourished; skin pale. No œdema or ascites. The apex beat of the heart was in the mammary line; right boundary to the middle of the sternum; sounds clear; lungs and abdominal organs apparently normal. The nervous system was very carefully examined, and no disturbance of function was found.

The examination of the urine was made by Mr. Teeters, Instructor in Chemistry in the University. His report is as follows: Total amount of urine in twenty-four hours, 810c; reaction, acid; specific gravity, 1.032; indican, moderate test; urea, 2.4 per cent; no bile; no sugar. Total amount of solids in 1000cc, 69.90 grammes. Albumen a little less than 6.1 per cent. The sediment consisted of epithelial cells and a very large amount of calcium oxalate crystals, the octahedral form.

The examination of the eye showed O. D. V. = 6/6, O. S. V. = fingers in 2m. The fundus of the right appeared to be normal. The fundus of the left eye was so characteristic as to immediately suggest the diagnosis of albuminuric retinitis. In the macula were three silver-white exudates, each one appearing about one-half the size of a pin head. Radiating

from these spots were a series of elongated exudates with a yellowish tinge. Only the macular region contained exudates. The disc was swollen, indistinct. The veins were slightly enlarged, and the whole fundus covered with small linear hemorrhages.

The case has now been under observation and treatment for about seven weeks. In the general condition of the patient there has been but little change. Vision in the right eye is still 6/6. In the left eye V — fingers in 4m., a slight improvement on the vision seven weeks before. The fundus of the right eye still shows no apparent change. In the left eye most of the hemorrhages have disappeared. The disc is not so much swollen and is more distinct. A large number of pin point exudates have appeared above; below and to the temporal side of the cartwheel macular exudates. These exudates made their appearance first at the temporal side of the macula, then above and below it. As yet there are no exudates at the nasal side of the disc. The urine of the patient has been tested from time to time, and always an abundance of albumen was found.

Because of the constant albuminuria, the characteristic retinal changes, the symptoms of uræmia, together with the absence of any apparent disturbance of the central nervous system, a diagnosis of one-sided albuminuric retinitis was made.

SERPIGINOUS SYPHILIDE OF EYELID, FOREHEAD AND EXTERNAL NOSE.*

BY H. V. WÜRDEMAN, M.D. AND W. R. MURRAY, M.D.

MILWAUKEE.

Illustrated.

The following case history is related on account of its resemblance to lupus, for the difficulty of diagnosis, the primary error of observation and to show the rapid improvement following appropriate treatment:

W. R., male, age 23, occupation hotel waiter, presented himself for examination Nov. 19, 1898, with a large ulceration of the left upper eyelid and temple.

Personal history: Patient stated that he had always been in good general health with the exception of diseases of childhood; denied any specific infection; six months previously he had been struck on the left eyelid and temple producing a bruise, which a short time afterward broke

* Discussed at Meeting of the Milwaukee Medical Society, April 4, 1899.





down, resulting in an ulcer; this had been treated by ointments, scraping, cauterization, etc., by two other physicians. "Internal medicine" had likewise been given. About one week before examination he had received a blow upon the forehead. No reliable family history could be obtained.

Patient somewhat anemic; no evidence of specific disease on body; lungs, heart and kidneys sound. On the forehead there was a fluctuating reddish swelling, presumed to be a cold abscess. The skin of the left upper lid with the exception of the ciliary margin was entirely destroyed; the ulceration extending to the left temple, the destruction involving all the layers of the skin down the fascia. The edges of the sore were indurated and excavated, but showed no evidence of cicatrization. The right wing of the nose was involved in ulceration of the same character, extending into the nostril. Microscopic examination of scrapings from the ulcer showed granulation tissue; examination of a number of slides for tubercle bacilli was negative. At the time of this examination a diagnosis of lupus with secondary infection of the nose, probably from picking with finger nails, was made. Patient was given bichlorid of mercury internally, ointment of pyrogallic and salicylic acid locally, and returned to his home in Iowa. When he came back one week later, there was considerable improvement. The ulcerations at the nose, eyelid and temple were curetted and thoroughly cauterized with the Paquelin cautery; the cold abscess, which was now prominent, was opened and tincture of iodine injected. On January 30 under chloroform anesthesia, a second curettment was done, followed by implantation of Thiersch's skin grafts. Tonics were given. Marked improvement occurred; the upper lid, one week later, being entirely healed, but shortly afterward the tissues again broke down.

February 15th the condition of the patient was far worse than on the first examination, there being at this time a large ulcer covering the greater part of the left upper lid and the temple; that of the temple being kidney-shaped, the upper part the size of a half dollar, the lower that of a quarter. There was no attempt at healing in the ulceration on the forehead, it being the size of a half dollar, the edges hard and indurated (see figure). The right wing of the nose, the floor, a portion of the right nasal septum was one large ulcer, the nasal passage filled up with crusts. This being on the opposite side, does not show in the photograph.

A consultation was then held with Dr. L. F. Frank (the dermatologist). The patient was put upon ascending doses of Kalium iodid, commencing with 15 drops of the saturated solution three times a day, increased until at the end of two weeks, he was taking 120 drops at a dose three times a

day. The ulcerations were treated with antiseptic washes and resorcin ointment locally. Rapid improvement followed, resulting in complete restoration of the tissues of the lid and nostril and of the forehead in three weeks.

The cicatrices have the characteristic syphilitic look and a diagnosis of his previous condition may now be readily made. However, at our first examination and during the time while the destructive process was extending rapidly at the periphery, all three ulcers seemed to be the result of local infection, and did not present the usual characteristic cicatrization of specific ulceration. That of the eyelid and temple followed upon distinct traumatism. The lesion on the forehead first arose from a bruise, the tissues then broke down, forming a cold abscess; this refused to heal under local antiseptics. That of the nose was distinctly the result of picking by the finger, and the local infection might readily have been carried thence by the hands, from the ulceration in the region of the eye. There was no other evidence of specific disease visible and no history of primary or secondary lesions could be obtained. Internal treatment by mercury gave no result; improvement at first followed local treatment and the operations; all these points apparently proved that the disease was non-syphilitic. The characteristics of the ulcer were thus apparently those of tuberculosis of the skin, although microscopic examination failed to reveal bacilli, scrapings of the ulcers showing only broken-down granulation tissue. Despite all these facts, the healing of the ulcers, the characteristic cicatrization and the improvement in general health, in the course of a few weeks after the exhibition, of large doses of iodid of potash, certainly prove the local lesions to be deep serpiginous syphilides.

128 Wisconsin Street.

CASSARIPE IN CORNEAL SUPPURATION.

JNO. A. DONOVAN, M.D.

BUTTE, MONT.

This remedy being fully described by Dr. S. D. Risley, of Philadelphia* I shall simply add one case to illustrate its comparative value.

May 24, Mr. J. J. W., miner, age 48, referred to me by Dr. H. J. McDonald with some quartz in left cornea, which I with difficulty curretted out, and gave him a sulphate of zinc in boracic acid solution, and 10 per

**Philadelphia Medical Journal*, Oct. 29, 1898.

cent orthoform ointment for the pain, so common after corneal lesions obtained in these mines.

I lost sight of him for ten days, when he returned with a severe ulcer, iritis, etc. I used hydraulic curetting with stream of corrosive sublimate 1-1000 several times, as recommended by Dr. Pleasants of Helena, and used by myself on other occasions successfully. Then later I used sharp curette, followed by pure carbolic acid three times and tincture of iodine several times, repeatedly opening the cornea to evacuate the pus, and using iodoform freely. July 3, I used 10 per cent ointment of cassaripe three times; next day I let the pus remain, as there was less pain; continued the cassaripe. July 5, he had six hours sleep for the first time without anodynes, and two days later pus was gone and pain entirely disappeared. I later increased its strength to 15 per cent, then to 20 per cent, and dusted the ulcer daily with xeroform to stimulate it. At present, August 14, eye is well and patient at work, though still a cupping in the spot, but transparent, and apparently slowly getting smaller. I have received satisfactory results in others; in one it seemed to aggravate the pain, but am pleased on the whole with results.

RELATIVE FREQUENCY OF IRITIS IN SYPHILIS AND RHEUMATISM, OBSERVED IN THREE THOUSAND CASES.*

RANDOLPH BRUNSON, M.D.

HOT SPRINGS, ARK.

These statistics are gathered from the records of four of my medical friends in the general practice of medicine at Hot Springs, together with my own. Each record book was taken separately, and in those cases where the diagnosis was made either of syphilis or rheumatism, they were noted, and then the histories were carefully gone over to ascertain whether iritis had occurred in either disease. This was done until 1,500 cases of each disease had been found. One serious objection may be made as to the reliability of these statements from the fact that the cases of iritis in the histories were not always seen by the gentlemen who had recorded them, as in many cases it was only "history," and not a direct observation.

Some time since I had under my care several cases of iritis, both syphilitic and rheumatic in origin, which were coming in with surprising

*Read before the section on Ophthalmology of the American Medical Association at the fiftieth annual meeting, Columbus, Ohio, June, 1899.

frequency, so it occurred to me to collect as many as 3,000 cases of both to determine the relative frequency of iritis in syphilis and rheumatism.

I had never looked up the statistics on the subject, so went into the work without prejudice, and as a result have the following to report:

SYPHILIS.

In series No. 1 iritis occurred 3 times in 111 cases.

In series No. 2 iritis occurred 12 times in 86 cases.

In series No. 3 iritis occurred 14 times in 558 cases.

In series No. 4 iritis occurred 11 times in 478 cases.

In series No. 5 iritis occurred 8 times in 267 cases.

Making a total of 48 cases of iritis in 1,500 cases of syphilis, which is a little more than three per cent of the entire number of cases examined.

RHEUMATISM.

In series No. 1 iritis occurred 1 time in 160 cases.

In series No. 2 iritis occurred 2 times in 127 cases.

In series No. 3 iritis occurred 4 times in 279 cases.

In series No. 4 iritis occurred 7 times in 408 cases.

In series No. 5 iritis occurred 9 times in 526 cases.

Making a total of 23 cases of iritis in 1,500 cases of rheumatism examined.

Thus we find iritis was present in about one and one-half per cent of all cases of rheumatism.

Since compiling these statistics I find that the percentage in my cases of iritis in syphilis and rheumatism is about twice as great as most authorities have given. However, I give them to you for what they are worth, and can only say that I have been conscientious and most careful with the data I had at hand.

It is my belief that if active heroic treatment is administered to a patient when the initial lesion is first seen, iritis will not occur once in 500 cases of syphilis.

At the suggestion of our able chairman I will endeavor to give the clinical differentiation between iritis caused by rheumatism and iritis caused by syphilis. This point is unquestionably the most important factor with which we have to deal in cases of iritis, for the simple reason that if we can arrive at a correct etiologic diagnosis from the pathologic appearances of the iris in those cases where the history is obscure, we will at once know the line of treatment necessary to bring about the desired results, and will not have to wait for the medicines administered to determine the diagnosis. Again, it is of paramount importance to recog-

nize the etiology of the disease in order to save the patient from the distressing synechiæ which will frequently follow in spite of the instillation of atropine.

Unfortunately, however, we cannot always determine the etiology of iritis from the clinical appearances, as there are a certain number of cases in which the clinical aspect will not give any indication of the constitutional cause of the inflammation; so, after all, we are more or less dependent on the history of the case and other data to confirm our diagnosis.

In syphilis there are certain characteristic signs in a given number of cases which will allow us at once to recognize the etiology of the disease, the most palpable of which are the papules, small raised masses embedded in the iris, usually not exceeding three in number, and generally located in the pupillary zone, but may be seen at the periphery of the anterior chamber or elsewhere.

They begin as small points, increasing in size until finally in a few cases may attain such size as to touch the posterior surface of the cornea. During this time their color changes from a reddish brown to a lighter shade, and on close inspection we will find numerous small vessels surrounding them. They may disappear completely, or leave a small arch-shaped synechiæ.

A white line is not infrequently seen at the bottom of the anterior chamber. This is due to the accumulated debris of broken-down condylomata. At the pupillary edge of the iris a rusty hue is observed sometimes, and is probably due to condylomatous masses diffused throughout the tissues in that position. The posterior synechiæ in this form of iritis are suggestive of the etiology of the trouble, as they are broad and dark in color, thus differing materially from those of rheumatism, which are thin and very light in color.

Typic symptoms of rheumatic iritis are intense photophobia, lachrymation, and ciliary redness, together with pain, which is liable to assume a paroxysmal type, and is so severe and sensitive that the patient cannot at times tolerate the weight of a feather in the region of the eye. The pain radiates into neighboring parts, such as the forehead, scalp, cheek, etc. The iris shows no structural change, as the effusion of lymph is not very great. Of course, condylomata are never seen, and posterior synechiæ when present are long, pointed, thin, and rarely pigmented. Pigmentary deposits on the anterior capsule of the lens are seldom seen. The pupillary border of the iris is very often fringed with a narrow grayish band of lymph.

As a general rule we may accept the following table to differentiate between iritis caused by syphilis, and iritis caused by rheumatism:

RHEUMATISM.

1. History of acute or chronic rheumatism, or some evidences of uric-acidæmia.
2. Photophobia, lachrymation, and pain well marked.
3. Condylomata never observed on iris.
4. Iris often very bright.
5. Exudative changes slight.
6. Posterior synechiæ long, thin, and not pigmented.
7. Very little tendency to formation of pigment on the anterior capsule of lens.

SYPHILIS.

1. History of syphilis either acquired or hereditary.
2. Photophobia, lachrymation, and pain not well marked.
3. Condylomata present in every case.
4. Iris often very dull.
5. Exudative changes very extensive.
6. Posterior synechiæ short, broad, and pigmented.
7. Very marked tendency to formation of pigment on anterior capsule of lens.

In my experience with this class of patients, will state that I do not agree with most authorities on the subject in regard to the absence of chorio-retinitis in rheumatism, as I have seen this complication occur many times in rheumatic iritis.

REPORT OF A CASE OF REMOVAL OF STEEL FROM THE EYEBALL AND EXHIBITION OF A NEW PORTABLE ELECTRO MAGNET.*

BY WALTER B. JOHNSON, M.D.

PATERSON, N. J.

Illustrated.

Mr. R. J., 41 years old, a laborer, of Boonton, N. J., was referred by Dr. J. L. Taylor to my service at St. Joseph's Hospital, Paterson, N. J., on October 13, 1898. He stated that while standing in the shop at a distance of six or seven feet from another workman, who was striking a

*Read at the January, 1899, meeting of the section of Ophthalmology and Otology, New York Academy of Medicine.

cold-chisel with a hammer, he felt something strike his eye. He did not experience much pain, but had a sensation resembling the falling of a cloud or curtain before the eye.

In the evening upon the same day on which he was injured his eye was first examined. On the upper third of the cornea near the limbus there was a penetrating wound about $\frac{3}{16}$ of an inch in length, and nearly horizontal; at a corresponding point on the iris, there was a linear aperture of equal size and shape, the lens was injured, and the anterior chamber was almost filled with blood; a magnet operation was considered advisable; the eye was cocainized. When the short end of the magnet was placed in apposition to the corneal wound the pupil was distorted and the iris pressed forward, evidently by the pressure of the foreign body. It was not considered desirable to persist in the effort to draw the steel through the wound at the point of entrance, or to enlarge the

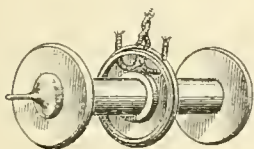


FIG. 1.

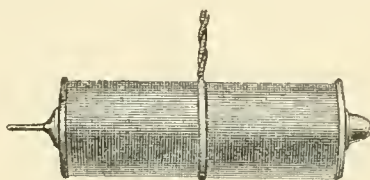


FIG. 2.—JOHNSON MAGNET.

opening to facilitate its removal, in consequence of the danger of injury to the eyeball in the ciliary region. An incision one-quarter of an inch in length was made through the conjunctiva and sclerotic behind the ciliary region, and below the insertion of the external rectus, after applying the short end of the magnet to the aperture without success; the long end was passed through the opening into the globe. After several efforts the piece of steel was removed on the long end of the magnet, the foreign body was held firmly by the lips of the wound, and could not be withdrawn until the magnet was rotated.

The piece of steel was very thin; it had sharp edges, and was nearly round, measuring slightly over one-eighth of an inch in its longest diameter and one-eighth of an inch in its shortest. The patient did not complain of severe pain during the operation. The subsequent recovery was gradual and uneventful, no pain being present after the first night, during which he complained of headache. There was a mild inflammatory reaction, accompanied by moderate ocular injection, which persisted for about a month, gradually diminishing in intensity. During this time

there was considerable swelling of the lens, the pupil was slightly distorted and adherent to the lens capsule.

The patient remained in the hospital for thirteen days. At the time of his discharge he was able to see shadows. He has been kept under occasional observation until the present time. The lens has been gradually absorbed, and the pupil has become nearly circular. There is still considerable discoloration of the iris, and a dense pupillary membrane is present. His visual field is now slightly impaired, especially in its nasal half.

The magnet here presented, which was used for the operation, is portable, and may be used in direct connection with any direct-current Edison incandescent electric-lamp socket, or by the application of the accompanying adapter with any Thompson-Houston socket; or by adjusting the Westinghouse attachment plug it may be used in connection with any Westinghouse socket. It is therefore applicable for use at any place in which a current for direct incandescent electric lighting may be found.

Fig. 1. The core of the magnet is made of the finest grade of soft Norway iron, which is susceptible of the highest possible degree of magnetic saturation. The short and long points of the magnet are adjustable by screw-thread attachment to permit their removal for perfect sterilization. The sample magnet is wound to 140 ohms resistance, with No. 28 single silk-covered magnet wire. One-half of the winding is in one direction when the core is turned in the lathe, and the other half wound in the opposite direction, giving the requisite number of ampere turns. The two halves are coupled in simple series by joining the two bottom wires. The terminals are then joined in the center of the magnet to a ten-foot conduction cord, which is attached to the ordinary Edison plug, and may be adapted to other systems as described above. The only feature in the mechanism or operation of the magnet which is in any way objectionable is a tendency to heat up, if left for too long a period of time, in circuit with the 110 or 120 volt incandescent current. This may be obviated to some extent by turning the current on and off after each application.

A change in the length of the core and size of wire used in the last sample magnet constructed, which is one inch longer and is wound with No. 29 wire to 310 ohms resistance, has increased the time, before the magnet becomes unduly heated, to about twelve minutes.

Fig. 2. The sample magnets were made by J. H. Bunnell & Co., of 76 Courtlandt Street, New York City, and could be sold singly for about \$15.

TOTAL SYMBLEPHARON OF THE UPPER LID RELIEVED BY THIERSCH SKIN GRAFTING.

BY F. C. HOTZ, M.D.

CHICAGO.

In the *Annals of Ophthalmology*, April, 1893, I have advocated the use of Thiersch skin grafts as a substitute for conjunctiva for the relief of various conditions resulting from the extensive destruction of conjunctiva. Among the conditions in which the grafting operations had been very serviceable was mentioned extensive symblepharon, which has been, and still is, generally considered a rather hopeless condition. Skin grafting is the only procedure that promises success in these cases, but it requires a great deal of patience and perseverance; and he who expects to relieve an extensive adhesion between lid and ball completely by one operation will often be disappointed.* But if he perseveres in the work he will finally be rewarded by excellent results. A very instructive case of this kind was recently reported by Dr. C. H. May.* In this case there was complete adhesion of both upper and lower lids with the globe, as the result of a burn from lime. The first operation restored a perfect fornix of the upper lid. In the lower lid the first operation restored the central half of the fornix; a second and third operation was needed to obliterate strong bands existing at the outer and inner canthi. The patient is able to wear an artificial eye, the lining of the conjunctival surface is smooth and soft, and after almost two years there has been no modification of the good result originally obtained.

Last summer I relieved a similar case by skin grafting, which I deem worth reporting in order to encourage further attempts in this direction. The right eye of the young man presented a symblepharon of both the upper and lower lids, resulting from injuries received in a dynamite explosion in April. The adhesion of the upper lid was nearly complete, a very small shallow pocket of conjunctiva only being left at either canthus. In the lower lid the adhesion was limited to the temporal half, but extended from the border to the fornix. The lid borders were united with the cornea, of which only a very narrow strip was visible, which by

*Restoration of the conjunctival cul-de-sac in a case of total symblepharon by means of Thiersch skin grafts.—*Archives of Ophthalmology*, March, 1899.

its densely opaque and flattened condition showed that the cornea had suffered irreparable damage. The firm union between the lids and globe precluded all movements, and the constant pulling of the muscles acting in association with the muscles of the left eye caused a great deal of irritation and discomfort in the right eye, and even interfered with the free use of the left eye. On July 7th I relieved the symblepharon of the lower lid under local anæsthesia by dividing the cicatricial bands from the lid border back to the fornix, the dissection being continued until the lid could be easily and completely everted. After sufficiently mobilizing the conjunctiva the edges of the ocular conjunctiva were united by two sutures, and in the same manner the wound of the palpebral conjunctiva was closed. The wound healed by first union, and though a slight contraction subsequently occurred, the result is perfectly satisfactory, inasmuch as the release between lid and ball is complete, and the conjunctival sac is deep enough for the insertion of an artificial eye.

July 24th the symblepharon of the upper lid was operated upon under chloroform anæsthesia. The dissection of the adhesions between lid and eyeball was continued until the ball was freely movable in every direction and the lid could be easily everted. I then cut from a thin sheet of lead an oval disc large enough that when slipped under the lids it would fill the whole space from the retrotarsal sulcus of the upper lid to that of the lower lid, and shaped and molded it so as to fit accurately the curvature of the ball. A Thiersch skin flap taken from the patient's right arm was spread out smoothly over this lead plate, with the epidermis toward the lead, in such a manner that it covered the upper two-thirds of both sides of the plate. Thus mounted, the plate was inserted under the upper lid just as we insert an artificial eye, and then the lower lid was made to slip over the lower part of the plate so that its lower edge rested in the lower sulcus. Finally the lid borders were united by three sutures, and a binocular bandage applied.

The patient felt no discomfort, and the dressing was not disturbed for four days. When, after this time, the bandage and the lid sutures were removed and the lead plate was taken out, the grafted flap was found adherent in its whole extent to the lid surface as well as to the ball. No more bandage, but the lead was worn for four days longer.

Unfortunately the Thiersch flap was not wide enough to cover the whole wound of the eyeball. Around the cornea there was an area of uncovered sclera, and when this wound granulated and cicatrized the ocular portion of the skin graft was gradually drawn forward toward the cornea and pulled the upper border of the lid down with it. The depth of the upper cul-de-sac was considerably shortened by this shifting pro-

cess, and although an artificial eye could be inserted and was worn ten days without discomfort, I was not fully satisfied, because the artificial eye showed too little motion and had a staring look.

I therefore decided upon a second operation, which was done on August 28th. I made an incision through the grafted skin along the upper tarsal border, and by free dissections mobilized the lid so that when everted its upper border could be easily turned away from the eyeball. There was now a large wound surface between the upper tarsal border and the strip of the graft left on the eyeball. A new skin flap, $3\frac{1}{2}$ by 2 cm., was placed upon this wound, and secured in its position by suturing its upper edge to the upper tarsal border, and its lower edge to the fascial expansion of the tendon of the superior rectus muscle, as recently suggested by Dr. Wolff* (Berlin). This skin grafting was also successful, and though on account of the loose tissue upon which it was implanted the flap shrunk considerably, it served its purpose to deepen the cul-de-sac and allowing the ball a greater freedom of motion. The artificial eye is worn with perfect comfort, looks very natural, and shows by the perimeter a rotation of 20° out and 30° in.

The use of the lead plate for holding the graft in perfect coaptation with the raw surfaces of lid and globe was suggested by the article of Dr. May who used a porcelain shell for the same purpose. I had no such shells at my disposal—they cannot be had everywhere—while we can always obtain a piece of lead which can be beaten by hammering into a thin sheet, and besides I believe such a thin, pliable lead plate adapts itself much better to the curvature of the eyeball. Either appliance is certainly of great value by insuring the speedy and uniform cohesion of the graft to the wound surfaces.

THE IMPORTANCE OF ASTIGMATISM.

DR. ROBERT M. LAPSLEY.

Professor of Ophthalmology, Keokuk Medical College, Keokuk, Ia., etc.

Astigmatism occupies so large a place in the practice of the average oculist that it at once demonstrates its important position. There are some points in astigmatism, however, which are not thoroughly solved. The general teaching, at least in America, seems to be that astigmatism should be corrected fully, and the correction worn constantly. In view of this fact an important question is: What harm is done if astigmatism is not corrected, and does it increase more rapidly when glasses are worn or when not?

*German Edition of *Archives of Ophthalmology*, Vol. 39.

I have been trying to answer that question in my own mind for several years on account of the common inquiries of patients as to whether glasses must be constantly worn or not, and also on account of a number of patients I have seen who have consulted some of the most prominent professors of ophthalmology in the West, and have been told they should wear glasses constantly or rapidly lose their sight, and, in fact, that they should have worn glasses a great many years previously, even though the eyes had been no source of annoyance. I never know how much of this may be a bluff to magnify the great man's importance, and how much of it he actually believes.

The symptoms of astigmatism are so well known, and the various tests also, that we need devote no space to their study.

Astigmatism increases from childhood to middle age. It increases when it is not corrected by lenses, and it also increases when it is so corrected. If it causes any of the symptoms caused by eye strain it should be corrected. It is often demonstrated that astigmatism exists and causes no symptoms. It may then be discovered accidentally in testing large numbers of children, both who complain of the eyes and who do not, or it may only be brought out in examining a presbyope. Such astigmatism may be the cause of "weak eyes" following an illness, and is often brought to notice in that way. If there is no illness it may be latent throughout life. It is this form of astigmatism I want especially to notice.

Patients find about the age when presbyopia begins to show that they do not see well for near-work, and perhaps have a little discomfort. They consult an oculist and astigmatism is found, and patient advised to wear glasses not only for reading but for distance. I will illustrate with a case in point.

CASE 1.—January 6, 1899, Mr. A. E., banker, age 43. Several months before seeing me patient had consulted one of the most prominent oculists in the West. He was told that he must wear glasses for distance as well as near-work; if not, serious damage to the eyes would be the result.

Condition of eyes:

$$R. V. = 15/20 + : 15/15 w. + 0.50 \text{ ax. } 150^{\circ}.$$

$$L. V. = 15/20 - : 15/15 w. + 0.25 \text{ C} + 0.25 \text{ ax. } 180^{\circ}.$$

Reads Jaeger No. 1, best at near-work distances with—

$$R. + 1.50 \text{ C} + 0.50 \text{ ax. } 150^{\circ}.$$

$$L. + 1.75 \text{ C} + 0.25 \text{ ax. } 180^{\circ}.$$

Patient objected to wearing distant glasses unless damage to eyes

would result if not worn. I advised him that it would be safe to do without them and remain under observation. He left them off and has suffered no inconvenience. In a case of this character it seems to the writer that it is safe to correct the astigmatism for close-work and not for distance when no symptoms are produced by doing without distance glasses.

This case will represent the many presbyopes who have some astigmatism that has never been discovered until age for presbyopia has arrived, or if discovered has given no special trouble before 40 years of age, and the observation of this case and many similar ones leads me to think that a large per cent of these presbyopes need no distance glasses.

The case above quoted was not advised to wear glasses because he had discomfort without them, but on the ground that some impending fate was hanging over him if he did not wear them.

Astigmatism in younger people is of importance in different degrees. We can all quote many cases of marked asthenopic symptoms relieved by cylinders from 0.25 D. to those of greater strength, but even these cases are likely to mislead us. We may correct $+0.25$ D. of astigmatism with marked relief, and yet we might have obtained the same relief by some other method, indicating that $+0.25$ D. cyl. was not the only means of obtaining relief.

I quote the following as one illustration of what is not uncommon:

CASE 2.—June 5, 1896, Miss E., age 19, has complained of eyes tiring easily, and headache after use of eyes for a year or so. Examination under homatropine brings out $+0.50$ D. astigmatism ax. 90° , and glasses of that strength were ordered. No further complaint was made after wearing glasses.

July 4, 1898, while I was absent in Europe, patient broke glasses, and as my record could not be found, and she felt she could not wait until my return, she consulted an optician with the result of getting $+0.25$ sph. for both eyes, which she wore with the same relief as she did the cylinders.

Along the same line I could also quote cases who have had glasses fitted for asthenopia who were not comfortable until weakened to a glass with no refraction, from which relief was obtained.

I might quote numerous cases where cylinders were of benefit for near-work, and going without glasses for distance caused no asthenopia, but still people affected in this way are not only advised to wear glasses constantly, but are told by some of our most noted men that a terrible fate awaits them if they do not.

I do not question the great importance of astigmatism, as every practicing oculist could quote case after case where great discomfort and inconvenience was dispelled by the use of cylinders; so large a number, in fact, that it would seem that the cylindrical lens is the most important remedy for headache and discomfort of eyes at the present time.

Many patients, though with astigmatism, do not need glasses, and many others need them only for near-work, and what I would like emphasized here is that it is not wise to require all patients with astigmatism to wear glasses constantly.

This matter has seemed an important one to me, as I have known so many instances of patients being greatly alarmed by terrible prognostications if they did not wear glasses constantly. I will state in closing, then, that astigmatism is the cause of much physical discomfort, and that glasses should be worn to the extent of the relief of discomfort if possible, but that it is not necessary, in all cases, to insist on the use of glasses farther than useful either in this way or in the improvement of vision.

CLINICAL MEMORANDA.

ALLEN GREENWOOD.

BOSTON, MASS.

ACUTE TENONITIS (TWO CASES).

The patients were sisters who in the daytime played together and at night occupied the same bed.

Mary, aged 7 years, was first taken ill and on the 19th of November, 1898, complained to her mother that her right eye and the right side of her head were paining her and that it hurt her to move her eye about. That night "she was feverish and fussy." The next morning the mother noticed that the right eye was protruding and that the skin of the lids was slightly red. The family physician was called in and found the following conditions. Marked exophthalmos of the right eye with some redness of the skin of the lids. No chemosis, and only the slightest amount of congestion of the conjunctiva. No discharge. Face flushed and temperature 102° F. The constant application of compresses wrung out of ice water was ordered.

Nov. 20th. Conditions about the same with temperature in P.M. of 101° F.

Nov. 21st. Pain has ceased and the temperature fallen to 100° F.

Nov. 22d. Child perfectly comfortable. Temperature 99° F. Exophthalmos the same.

Nov. 23d. The only symptom remaining is the exophthalmos.

Edith, aged 5 years, began on the evening of Nov. 22, 1898, to complain of the same symptoms of pain about the right eye and went to bed fussy and feverish. The next morning she presented conditions identical with those observed in the case of her sister. The treatment was the same and the disease ran a similar course.

I was called to see them by the physician in charge Nov. 25, 1898, on the third day of the illness of the second case. I found two smiling little girls lying side by side in bed both showing a very marked right sided exophthalmos.

As both cases had passed the acute stage and showed practically identical conditions, one description will answer for both. The exophthalmos amounted to about 7 or 8 mm. and could not be reduced by pressure. Pressure caused some complaint of soreness. The eye could be moved in all directions, but not so freely as the other.

There was no chemosis, but a slight congestion of the palpebral, and ocular conjunctiva was present.

The skin of the eyelids showed a very slight dusky redness, but no swelling. A careful ophthalmoscopic examination showed nothing abnormal or unusual at the fundus or in the media. A few days after my visit the exophthalmos began to diminish and in two weeks' time had entirely disappeared. A careful inquiry into the previous histories in regard to disease or injury threw no light on the cause of the condition. No abnormal nasal or lachrymal conditions could be found. I think I am justified, however, in ascribing them to some acute infection which may have gained an entrance through a slightly impaired conjunctiva. Whether the second child became infected from the same source as the first or by direct transmission from the first I cannot tell.

BILATERAL SPONTANEOUS LENS DISLOCATION.

The subject of this unusual occurrence was an inmate of the Massachusetts School for Feeble Minded. She was 22 years old, and had been in the institution for over 15 years. She was one of the very lowest types of idiots, living simply an animal existence. For more than a year it had been noticed that her general condition had been failing. She was subject to having periods of mental excitement.

On July 14, 1899, one of the attendants noticed that her right eye was inflamed and the clear cornea showed a whitish spot in its lower part.

The next day the white area had increased and the eye had become more inflamed, with the addition of swollen lids and photophobia. On July 17th it was observed that the cornea of the left eye also showed a whitish spot below the pupil, but the eyeball was not inflamed. I first saw the patient July 18th, and found the following conditions. O. D. eyelids inflamed and swollen. Conjunctiva inflamed and marked circumcorneal injection. Cornea steamy throughout. Through the infiltrated cornea there could be seen an opaque lens lying in the lower part of the anterior chamber in front of the iris. It appeared to be about two-thirds the normal size. The small crescent of iris seen through the upper and least infiltrated part of the cornea above the edge of the opaque lens showed a muddy and discolored appearance. O. S. lids normal and cornea clear, with no inflammation of the eyeball. An opaque lens was seen lying in the lower part of the anterior chamber in front of the iris. It was about half as large as normal, and moved when the eye was moved. Pupil clear and iris tremulous. No history of traumatism could be obtained, and there was nothing about the head or eyes to indicate it. A diagnosis of spontaneous luxation was made, the condition evidently being due to the abnormally small size of the lens, with probably an atrophy of the zonule, which itself was but part of a general degenerative change. In the right eye the lens acting as a foreign body had produced an iridocyclitis and keratitis.

An immediate operation was advised, but owing to the necessity of gaining the consent of the girl's guardians it had to be postponed until July 20th. On account of the patient's mental condition a general anæsthetic was necessary, and therefore ether was given. I had planned to enucleate the right eye, but realizing that she would never tolerate a prothesis and hoping that the inflammatory process would subside on removal of the lens, I decided to follow the conservative course. The usual antiseptic precautions were taken and the right eye operated on first. An upper corneal section was made long enough to allow the passage of the lens. The instant the cut was finished quite a large amount of rather fluid vitreous escaped, confirming the diagnosis of atrophy of the zonule. The vitreous was cut away, only to be followed by more. On attempting to remove the lens by use of the wire scoop it was found to be adherent to the iris and cornea so that it could not be entirely removed from the latter, and considerable of the former was cut away. The cut iris bled freely and some blood had to be left in the anterior chamber. After cutting away all protruding vitreous and iris and washing out the conjunctival sac, the lids were closed. At this time

I think it would have been better judgment to have enucleated. The left eye was then operated on, the corneal section being smaller and made in the lower part. As before there was an immediate gush of vitreous, which was cut away, and then the lens was easily removed with the wire loop. The iris was smoothed back, the lids closed, and the eyes bandaged.

To prevent the patient removing the dressing and to keep her moderately quiet, she was put into a straight-jacket and given subcutaneous morphine.

July 21st. O. S. in good condition, eserine instilled. O. D. inflammation about as before operation. Temperature 100° .

July 22d. O. S. wound healed and anterior chamber restored. Pupil clear and no circumcorneal injection except just below corneal wound. O. D. more inflammation. Eyelids red and swollen. Cornea surrounded by a marked chemosis. Iodoform dusted into conjunctival sac.

July 24th. O. S. no inflammation. Pupil clear, though slightly drawn down by adhesion of iris to inner surface of corneal wound. O. D. chemosis very much less and eyelids only slightly swollen. Cornea looked clearer, wound had closed, and the blood in the anterior chamber had partly absorbed. Iodoform again used.

July 26th. O. S. in good condition. O. D. chemosis entirely disappeared and the whole eyeball looked better. Morning temperature 99.5° ; evening, 101.2° .

July 28th. Early this morning the patient was found dead, though the evening before she had seemed as well as usual. I think death was due to her poor vitality, which is nearly always the case with these low types of idiots.

In this case the right eye would have atrophied or been enucleated, but the outlook for useful vision from the left eye was excellent, and it is to be regretted that her early death prevented the ultimate results from being observed.

KERATOCONUS.

BY B. E. KELLY.

CARROLL, IOWA.

I herewith report a case of keratoconus, the treatment employed and the results, because, so far as I am aware, nothing similar is given in text books or reported in journals.

Annie P., aged 11 years, was referred to me by Dr. C. A. Beitenman, in June, 1897. Her parents had been aware for several years that she

could not see as well as their other children, but gave it no serious attention. A few days previous to her coming to me, her mother noticed what she termed a white scum over one eye. On examination the right cornea was found to be very conical; the exact curvature was not determined, and the apex of the cone was infiltrated with a white deposit. Her vision was limited to the counting of her fingers two feet away, when held between her face and a window, and it could not be improved by lenses.

An iridectomy under cocaine was performed, and a compress was placed over the eye, and a firm pressure was maintained by the use of a piece of elastic webbing two and one-half inches wide.

While the keratome was passing through the cornea the child became alarmed and difficult to control, and the point of the keratome pricked the lens capsule. On dressing the eye on the second day the lens was found to be quite white and opaque. As soon as the eye had recovered from the iridectomy the lens capsule was needled, and after a time this was repeated, which left a clear, dark pupil. The compress was continued for about three months, at which time the curvature of the cornea was but little more than normal. The vision uncorrected was 20/50 with a + 1.00 D. Sph. 20/60, which could not be further benefited by glasses.

So far as the writer is aware this is the first time the lens has been removed for keratoconus. This, and the results which were unusual, is the writer's excuse for reporting the case.

IS ORTHOFORM ALWAYS SAFE IN KERATITIS?

C. R. GARDNER, M.D.

NORTHAMPTON, MASS.

A ten per cent ointment of orthoform, it is claimed, relieves pain for twelve to twenty-four hours after its application to corneal ulcers.

The following ointment was given to a debilitated young woman with hysterical tendencies, because of severe local pain, from a marginal ulcer at outer corner of horizontal axis, left eye:

R Orthoform new grs. iij.
Iodoform grs. vi.
Cosmoline drachm i.

The ulcer was cleaned daily with a ten per cent solution of protargol, applied with cotton probe. One drop three times daily of eserine sulphate one-half gr.; Aquæ destillat oz. i. used, and the eyelids closed by silk isinglass plaster. This plaster, owing to tearing, had to be replaced

several times, day and night, and the above unguent was used each time. The ointment seemed to relieve pain entirely for about two hours following its use.

On the fourth day, a faint gray line of infiltration stretching from ulcer along the outer and lower third of circumference of the cornea was noticed. On the fifth day, it had doubled in width; had a white base; revealed a denuded furrow, and extended along the lower half of the circumference. Protargol ten per cent was again applied along the line of the furrow, as well as at the ulcer; also, after use of holocain, the application of a cotton probe with fine tip, dipped in hydrozone. Sixth day, the furrow had widened, the base of infiltration was wider and more extended. Mistrusting that orthoform had in some way interfered with nutrition, it was now omitted.

Except the hydrozone, the same treatment otherwise was used and a rapid change for the better followed.

Islands of clear tissue appeared, the edges of furrow became rounded, its base transparent, and the furrow filled up level.

The ulcer also has grown smaller and is now practically healed.

RAPID RECOVERY OF NORMAL VISION FOLLOWING HEMORRHAGE IN THE VITREOUS.

LOUIS A. BIZE, A.B., M.D.

TAMPA, FLA.

Mrs. F. B. K. came to me, April 15, with a history of sudden impairment of vision in the left eye, occurring the day previous, following excessive use of the eyes.

The first and only symptom spoken of, besides impairment of vision, she likened to water flowing over the sight. Upon examination, I found the pupil dilated, tension normal, no external congestion. Vision perception light. With the ophthalmoscope, I found vitreous cloudy and full of flocculent material, unable to see the fundus.

I at once diagnosed retinal hemorrhage and advised her to keep quiet, remain in partially darkened room, apply ice five or six times daily for the first twenty-four hours. I also gave her sat. sol. kali iodide, beginning with fifteen drops and increasing two drops per dose, daily, up to fifty and a mild laxative. I requested her to return one week from date and at that time was gratified to find that she could recognize hand movements at ten feet; she continued to improve rapidly and at the end of the

fourth week fundus could be seen fairly well; I then found the location of the hemorrhage to be about one-third inch below and to right of macula. I continued the use of the kali iodide and advised complete rest for the eyes. Examined her eye and tested her vision on each visit and at the end of the eighth week found she could see 20/20, a small nearly central scotoma (possibly $\frac{1}{2} \times \frac{1}{4}$ in.) not sufficient to interfere with the usefulness of the eye, being the only bad result left.

A REPORT OF TWO CASES OF HERPES ZOSTER
OPHTHALMICUS—ONE COMPLICATED
BY GLAUCOMA.

BY JAMES W. DALBEY, B.S., M.D.,

Professor of Ophthalmology, University of Iowa, and

L. W. DEAN, M.S., M.D.,

Assistant Ophthalmic Surgeon to the University Hospital, Iowa City, Iowa.

Herpes Zoster Ophthalmicus is not an uncommon disease. It is usually very easy to diagnose; it generally runs its course without being affected very much by treatment. Its sequelæ are usually not serious, leaving, as it does, only a slight irregularity of the surface of the cornea. The two following cases are presented, simply because they are out of the ordinary, and are more or less interesting:

James M., age 76, farmer; family history negative. Patient says he has always been strong and well. He has used alcoholic liquors all his life, but never to excess. Until four weeks ago he had no trouble. He was certain his eyes had never troubled him in the least. Then he noticed an eruption on the skin over his right eye, which extended up into his hair. In several days his right eye became inflamed, and then he began to suffer intense pain, extending over the whole of the right side of his head. The left eye and left side of his head was in no way affected. When he presented himself at the hospital he was suffering intense pain. The pain was so severe that he had been unable to sleep. Dr. Ristine, who sent him to the hospital, said that it was almost impossible to control the patient even with opiates. The skin of the patient over the right eye, extending back into the hair, along the course of the supraorbital nerve, was covered with blebs and crusts. These were all confined to the right side of the head. The larger areas, when the crusts were removed, presented an ulcerated brownish surface, characteristic of Zoster gangrænosus. The conjunctiva was swollen, red, and actively secreting.

The cornea showed a typical keratitis bullosa. It was covered with a number of transparent blisters, none of which had, as yet, ruptured. The pupil of the eye was slightly dilated—reacted slowly to light. The tension instead of being slightly diminished, as one usually finds it in Herpes Zoster Ophthalmicus, was here $+1$, a decided increase over the normal. The fundus could not be seen. The left eye showed no increase of tension or other disturbance. Fundus appeared normal. Vision corrected $+1D=6/6$. Urine, light yellow in color—sp. gr. 1021 acid. No albumen, no sugar. The patient was placed on strychnia and Tinc. phosphide during the day, and chloral hydrate and morphine at night. Every morning a purgative was given. This general treatment was continued as long as the patient remained in the hospital. Eserine $\frac{1}{2}$ gr. to the ounce, was dropped in the eye every hour during the first day. On the morning of the second day the tension of the eye was normal, but the patient had an excruciating hemicrania. During the day no eserine was used. The patient was seen at 10 P. M.; tension was then $+2$, and the pupil dilated even more than the night before. The patient was kept upon eserine, and the eye washed out with boric acid. The cornea was protected by placing iodoform ointment in between the lids. It was impossible to keep a bandage on the eye, because the patient would not allow anything to touch the infected areas of the skin. The tension of the eye remained decidedly above normal. Owing to the excessive secretion from the conjunctiva, the irritability of the eye, and the impossibility of keeping the patient quiet, an iridectomy was not made. The patient remained in the hospital ten days, then left without permission.

Dr. Ristine writes that later he had an iridectomy performed, followed by panophthalmitis and loss of the eye. It is now over a year since the patient first presented himself, and as yet there is no indication of glaucoma in the left eye.

Case II. Miss M., age 20; family history negative. Patient says she has always been weak, and never was able to do much work. Patient was exceedingly nervous; she would cry without any apparent provocation. A year before she had been treated for hysteria; patient presented herself, complaining of intense pain in and under the left eye, which was constant. Neither the supraorbital or infraorbital nerve was especially sensitive to pressure; there was no indication of Herpes. Because of the previous history of hysteria, the present nervous condition of the patient, together with the absence of pain in pressing on the infraorbital nerve, a diagnosis of neuralgia of a hysterical nature was made. The patient was treated for two weeks with electricity,

externally, and Tinc. phosphide internally, with no improvement whatever. At the end of that time a Herpes made its appearance along the infraorbital nerve, extending up on the lower lid, but not into the eye. According to Kaposi, it is not a rare thing to have the Herpes in other parts of the body preceded by an excruciating neur algia lasting for several weeks, and here we have that condition in the eye.

SOME EXPERIENCES OF AN OPHTHALMIC SURGEON IN THE ARMY OF THE PHILIPPINES.

NELSON MILES BLACK, M.D.

Capt. and Asst. Surg. U.S.V. and Act. Asst. Brig. Surg. 2d Brig. 1st Div. 8th A.C.;
also of Milwaukee, Wis., U.S.A.

Naturally the rigid physical examination a recruit for the U. S. Army has to undergo before acceptance, precludes very much work for an ophthalmic surgeon, and only those cases arising from exposure, trauma, and secondary to various constitutional conditions are met with. The enlisted man of the line must have, according to *Tripler's Manual*, not less than 6/viii vision with either eye. Officers whose refractive error is not too great, and is fully corrected by lenses, are accepted, and men can be enlisted in the hospital corps whose refractive errors are corrected, especially in time of war, when men are accepted who would be rejected at once in times of peace.

In the volunteer organizations some surgeons made no test of eyes, and from those regiments there arose the most trouble, in not a few cases men learned the letters of the test card before coming up for examination; and these same men, when tired of army life, would apply for discharge on surgeon's certificate of disability on account of their eyes. An ophthalmoscopic examination, together with close questioning, especially when the penalty for fraudulent enlistment was made known to them, would bring out the truth, and they would return to duty without giving further trouble. In many instances men with normal vision in one eye, and from -6/xxxv to -6/lx in the other, were accepted by the recruiting officer, their previous record as sharpshooter or marksman in the National Guard being sufficient guarantee for their qualification; but the condition was noted on the muster rolls, and so could not be used as an excuse for obtaining a pension when discovered in the mustering out examination. One case of old granular conjunctivitis was passed by the examining sur-

geon, and had to be disposed of by certificate of disability, as having been incurred in line of duty. Another volunteer, having an irido-dialysis in upper and outer quadrant, with an accommodative ptosis covering it, tried to get discharged, saying it had occurred in line of duty, but finally owned up to its having occurred twelve years ago.

Refractive errors, varying from $+0.50$ to $+4.00$ hyperopia, to -7.00 myopia and astigmatism at every angle was found; but the U. S. Government does not furnish glasses, nor could they be obtained nearer than the United States, so the cases were simply reported.

Pterygia were very numerous; I must have removed a dozen at least. Many were convalescent from typhoid and malarial fevers and dysentery, who were terribly run down physically, complained of much annoyance from small refractive errors, but on recovering health and strength this condition passed away.

Purulent conjunctivitis was prevalent, and I secured best results with the following wash, flushing the conjunctival sac freely after hot bathing:

R Alumen.
Acidi Carbolici.
Zinci Sulphatis, aa 1.00.
Aqua Dest. 150.00.
Mft. Sol.

We were confined for our drugs to the medical supply table of the army, and this seemed to be the best obtainable.

Purulent conjunctivitis, due to gonorrheal infection, was not infrequent. Of seven cases, five made perfect recoveries, under atropin, constant iced compresses, and flushing hourly with bichlorid solution (1-1,000), followed by saturated solution of boric acid at first, the bichlorid solution being lessened in strength as the condition improved. Argenti nitrat was faithfully tried, but proved inefficient. In one of the cases there was total prolapse of the cornea of the right eye, so I enucleated it for cosmetic purposes. The remaining case had a small staphyloma in lower outer quadrant of left eye, which was removed and left $+6/xii$ vision.

Four cases of iritis progressed rapidly to recovery under anti-rheumatic treatment, atropin and hot bathing. In one case the treatment was stopped for a few days, when I was called into the field on account of the surgeon's time being so fully occupied taking care of wounded, and when I saw the case three months later there was complete posterior

synechia, and the man had been recommended for discharge, swearing he would get even with the government for loss of his vision.

There has been up to this time no cases resulting from specific conditions. I suppose it is too early to expect them.

There was one case of idiopathic diffuse retinal hemorrhage in a Norwegian, age 22. When I first saw him there was only two small patches about size of pinhead between macula and disc in right eye, and in three days they had increased to about fifty, and become somewhat confluent, and had begun to appear in the left eye. I could take no field, as time could not be spared for it, and I had no perimeter. I put him on atropin, hot bathing and 3.24 gm. doses Kali Iodid tid, and had all sorts of dermititis and gastric disturbances, and could only give him 0.200 gm. of the iodid three times daily. I saw him last (about three months after first seeing him), on the firing line of the Third United States Artillery before Malolos, using a Krag-Jorgensen very effectively on the enemy, so don't think enough of the hemorrhages remain to give much trouble.

I saw one case of tobacco amblyopia in an old quartermaster sergeant, who had been in the service twenty-nine years. He received a six-months' sick-leave, so I do not know how he turned out.

Many of the men who had been long in the service came for glasses for presbyopic conditions.

The men overcome by heat complained a great deal of *muscæ volitantes*, but ophthalmoscopic examination revealed nothing beyond slight hyperæmia of the disc.

My duties as medical officer in charge of one of the wards of the First Reserve Hospital, with never less than seventy-five cases, and from that up to one hundred and eighty, and *sick* ones at that, did not give me much time to spend in ophthalmic work, although ordered to "attend to all eye and ear cases referred to you in addition to your other duties," and I was attending to about seventy ear cases each day beside, but the above are a few cases that I kept a very incomplete record of (records being a secondary consideration,) up to February 4, when I was ordered into the field, and ophthalmic work had to be given up as far as I was concerned.

THE OPHTHALMIC RECORD.

*A MONTHLY REVIEW OF THE PROGRESS OF
OPHTHALMOLOGY.*

VOLUME VIII.

CHICAGO, NOVEMBER, 1899.

NO. 11, NEW SERIES

EDITORIALS.

AGAIN THE OCULIST AND OPTICIAN QUESTION.

We are all thoroughly familiar with the controversy that for ages past has been raging between the physician and prescribing druggist—a controversy that would subside from time to time, when each side became sufficiently wearied or recognized the hopelessness of the struggle, and then again would break out with renewed intensity when some particularly aggressive act on the part of the dispenser of medicines reached the public ear. The physician can claim, indeed, as the result of his long and determined effort, some few breaks in the protecting armor of the thrifty dealer; for many states, through the efforts of their medical societies, have interposed legal obstacles to the dispensing of poisons, and occasionally we learn of some druggist being arrested, and even fined, when his unwarranted and selfish act is made known through the medium of the coroner's office.

A similar, though far more hopeless, condition of active warfare is now in progress between the oculist and optician, or rather, we should say there is just now a very active outbreak of hostilities, imposed upon the usual chronic state of suspicion and mistrust. At the present time, the fact that the controversy waxes so exceedingly warm is but proof that some of the opposing forces, being damaged, are giving more or less expression to their feelings. On the one side, it is insisted that the conditions calling for correction constitute disease, and being so, only one properly and scientifically qualified is prepared to judiciously and successfully encounter it. On the other side, they claim that any one with a month or six weeks' training, and nerve sufficient, will do as well. How

is it possible for matters to be otherwise, when the mighty dollar forms the basis of the controversy? Not satisfied with simplicity of name, the optician seeks the more alluring titles of refractionist, oculist-optician, ophthalmic-optician, or any other old catch-patient title or device. Having drawn his victim in, he will, with smooth and crafty speech, hasten a favorable decision, and then watch with smiling satisfaction the gold-frame-bedizened hayseed trotting on. He is deterred by no ethical control whatever, and sees only the large and immediate profit before him. Being ignorant of normal physiological relations or pathological conditions, so often associated with complex errors of refraction, he is totally without the responsibility that is essential for securing the highest quality of work. He has a superficial knowledge of the test case, and perhaps even some acquaintance with the ophthalmometer; but at best his work is purely mechanical, and at no time can he be confident of the accuracy of his conclusions.

Largely dependent on a floating trade, he is really quite indifferent to the ultimate results, and undoubtedly the disposal of a golden frame is of more consequence than the accurate adjustment—the fitting of the lens is but an incident, the selling of the glass and frame the factors, of the trade.

The oculist, after long years of general medical training, devotes other years to gaining a knowledge of his special work. He must certainly be as well informed in the mechanical principles as the optician, and in addition understand the ocular relations, both in health and disease, and the general relations of the eye, in both health and disease, to the general economy. With this tremendous handicap of training there can be no question as to the more fitting person to do the work.

Why is it, then, that the optician has the cream of all this business, and only allows, in a begrudging way, a few complex or impossible cases to reach the oculist, who, weary-eyed himself, is perhaps longing for something easy?

How, then, may this matter be determined, in order that the future of the oculist may be secure and the optician get his just reward? Not by local measures surely. In proof of this, a society of oculists was organized some few years ago, in one of our larger cities, and aside from professional culture, one of the avowed objects of its formation was to control the dealers. While the society still meets at the old stand, attends strictly to legitimate pursuits, and struggles for existence, the opticians are buying blocks and wearing gems.

As the clear-cut statement of Dr. Allport must be accepted, that an eye requiring correction is a pathological eye, and that without exception

a mature medical judgment is necessary to decide within what limits correction should be made, then the whole subject should be taken from all interested and settled by such legal rulings as will place the matter in secure and final control. Aside from this, there is but the slow process of educating the public up to an understanding of their true condition and the proper means of securing relief. Like all matters of education, this is a slow and tedious process, and once more places the oculist at a disadvantage in the struggle. For, while the optician and his agents may without scruple approach the public, the oculist by so doing would degrade both his profession and his standing. In the mean time let him run who must.

W. E. H.

THE OPTICIAN QUESTION AGAIN.

Having already aired my views on this subject quite fully, I should not return to it if I had not been asked by Dr. Casey Wood to do so.

I think there can be no question that if a person has any difficulty in using his eyes, or thinks for any reason that he needs glasses, the best and safest thing is to consult a good oculist; but it seems to me equally clear that the next best thing for a large class of patients is to go to a good optician. Many people, probably the large majority, will not go to an oculist until they have tried what they consider the cheaper plan of going to an optician, and it is a poor policy for us oculists to try to compel them by legislation to do otherwise. As long as opticians confine their ocular therapeutics to the fitting of glasses, I certainly think that we had better leave them alone. To consider this question fairly, we must clear our minds of cant, and avoid exaggerating the evils which result from the prescription of glasses by non-medical men. Some patients undoubtedly suffer serious consequences by losing time in this way, when they should be having active medical or surgical treatment; but so far as I can judge such cases are quite rare, while as for the injurious effects of improper glasses, although I have seen many patients who suffered inconvenience and distress from them, I have never yet seen an eye which I could candidly say I thought had been actually damaged by the use of an improper lens. Some authorities think they have observed neuritis and choroiditis from uncorrected or improperly corrected refractive errors. I have seen nothing of the kind, and am very skeptical about its ever occurring; and so far as the influence of eye strain on the development of glaucoma is concerned, there is a good deal to be said in

favor of the view that exertion of the ciliary muscle tends to prevent rather than bring on this disease. Of course, as already intimated, it occasionally happens that an optician does harm by holding patients with serious diseases; but in my experience reputable opticians are generally very conscientious about refusing to fit glasses to people whom they think need something else. By reputable opticians, I do not mean the average traveling spectacle vender, nor the "refractionist" who tries to deceive the public by calling himself a "doctor"; these, so far as I know, are generally robbers as well as humbugs.

With regard to the practice of the physicians, who refer cases presumably requiring glasses to opticians, this, where it occurs in large cities, is certainly reprehensible; but is, I believe, very exceptional. In the smaller towns, however, it is sometimes impossible for doctors to get their patients to do the best thing, and in such cases the next best thing is to try the local optician. Perhaps one other reason why physicians sometimes do this, is because they dislike to subject their patients to unnecessary expense, thinking that if glasses are not needed the expense of an examination will be saved if an optician rather than an oculist is consulted. Admitting that this may be a "penny wise" policy, it suggests one way in which we, as specialists, can honorably do something to get even with our friends, the general practitioners. If in doubtful cases, which they refer to us, we were to make no charge, or only a nominal one in case the event proved that the trouble was not due to the eyes, I think we should hear much less of this phase of the difficulty.

H. G.

A DEATH FOLLOWING A STY.—H. Guth (*Prager Medizinische Wochenschrift*, No. 3, 1898; *St. Paul Medical Journal*, May, 1899) says that a woman was brought into the clinic with both lids greatly swollen, the conjunctiva chemotic, both eyeballs protruding, high fever, Cheyne-Stokes breathing, tonic and clonic spasms. Ophthalmoscopic examination showed septic retinitis; death followed; post-mortem showed that there was suppurative meningitis which had proceeded through infection from a hordeolum; the suppuration had infiltrated the orbital tissues and penetrated through the right cavernous sinus to the meninges.

CORRESPONDENCE.

OPHTHALMIC SECTION.

INTERNATIONAL MEDICAL CONGRESS.

TO THE EDITORIAL SECRETARY OF THE OPHTHALMIC RECORD.

Dear Sir,—The committee of arrangements of the Section of Ophthalmology of the Thirteenth International Congress of Medicine, to be held in Paris, August 2, 1900, has adopted several subjects for special discussion, amongst which is the following: "Valeur comparative de l'énucléation et des opérations susceptibles de la remplacer." Professor Panas, the president of the section, has requested me to ascertain the opinions of American surgeons on this subject, or in other words, to prepare a report based upon these opinions, which shall be similar to the one recently published by the Ophthalmological Society of the United Kingdom on the same topic, and thus place on record the collected American evidence respecting the various operations which may replace enucleation of the eyeball. To this end I have prepared a printed form containing a series of questions, the answers to which will facilitate this statistical investigation, and have sent it to the oculists of the country. As there is no complete list, doubtless some ophthalmic surgeons have been missed. I hope, therefore, by the publication of this letter, to bring the matter to the attention of our branch of the profession, and respectfully request that any colleague who has information on this subject will, if he has not yet received one of these forms, communicate with me. It is particularly desired to collect evidence in regard to Mules's operation, and the various operations for the implantation of a glass ball after complete enucleation.

Yours very truly,

G. E. DE SCHWEINITZ.

1401 Locust Street, Philadelphia, Pa.

REVIEW.

THE NEW GRAEFE-SÆMISCH HANDBUCH DER GESAMTEN AUGEN-HEILKUNDE.—Of all the systematic treatises on disease of the eye that have appeared during the last thirty years, none can compare in importance with the new and greatly enlarged second edition of the Graefe-Saemisch *Handbuch der Gesamten Augenheilkunde*. Indeed one might affirm with full justice to all the other admirable systems of diseases of the eye that have from time to time appeared here and in other countries, that this *Handbuch* is the only one that can, in the true sense, be considered a complete study of ophthalmology. We may readily assume, from the character of the parts that have already been issued, and from the position in the medical world held by the authors who are to contribute the remaining chapters of this grand work, that the forthcoming volumes will be in no wise inferior to the thirteen parts now lying before us. It will be remembered that the books of the first edition numbered seven, composed of fourteen chapters, all made accessible to ophthalmologists in the years 1879 and 1880. The program of the new handbook varies somewhat from the original announcement. The new edition is brought out by Professor Saemisch alone, it having been arranged that the co-operation of Professor Graefe should be confined to the first issued contribution, making the eleventh chapter (eighth volume) of the work. It is interesting to note that of the twenty-three contributors to the first edition of this encyclopædia, only ten (Professor A. Graefe, Dr. E. Landolt, Professor Leber, Professor Merkel, Professor von Michel, Professor Saemisch, Professor Schirmer, Professor Schmidt-Rimpler, Professor H. Snellen, and Professor de Wecker) have written for the second edition. The places of the other thirteen have been filled, and new subjects are to be presented by the following brilliant array: Dr. Theodor Beer, Professor O. Eversbusch, Dr. A. Fick, Professor R. Förster, Professor Sigmund Fuchs, Professor Greeff, Dr. A. Groenew, Dr. Heddaeus, Professor E. Hering, Professor C. Hess, Professor E. von Hippel, Professor J. Hirschberg, Dr. A. Kraemer, Prof. M. Nussbaum, Professor H. Sattler, Professor

Schleich, Professor Oscar Schultze, Dr. H. Snellen, Jr., Professor Hans Virchow, and Professor A. Wagenmann. There are consequently thirty authors represented in the Second Edition. So far we have received but three parts (two hundred and forty pages) of Graefe's contribution (Disturbances of the Motility of the Eyeball, with a Description of its Normal Movements). These were published before the death of the lamented author, but we trust that his decrease will not interfere with the appearance of the remainder of the chapter.

In addition to the large amount of material that has accumulated since 1879, to which it is necessary to refer in the new work, twelve new chapters have been added, three of them on the anatomy and physiology of the eye, nine others on its pathology and therapeutics. In other words, we are promised thirteen volumes of printed matter and illustrations, in addition to a separate index that will make a fair-sized book in itself, so that practically a new work is contemplated.

Hirschberg writes in his happiest manner a history of "Ophthalmology Among the Ancients," and one must conclude, after even a casual reading of these pages (four hundred and eighteen in all), that many of our so-called modern inventions and discoveries were the familiar property of Claudius Galenus, Celsus, Ptolemaeus, Damionos, Paulus Aegineta, and the other masters of the Greek school of surgery.

As one example of these numerous rediscoveries, Hirschberg quotes from Paulus the statement that certain surgeons (Celsus, Archignes, and Galen) had been in the habit of trephining the nasal portion of the bony orbit, so that the purulent secretion of a chronic dacryocystitis might find its way into the nose. This method of dealing with nasal duct obstruction has often been rediscovered, says the author in a foot-note, and he refers, as an instance of it, to Kyle's article on this subject in the December, 1897, number of the *American Journal of Ophthalmology*.

It will be remembered that it was this versatile author who translated the ophthalmological portion of the Ebers papyrus, a record fully set forth in the first twenty pages of Chapter XXII.

Interesting as is this study of ancient ophthalmology, we look forward with even greater pleasure to Professor Hirschberg's second essay, "The History of Ophthalmology in the Middle Ages and in Our Own Times."

Dr. Kraemer, of Zurich, writes in a most interesting manner on the "Animal Parasites that Infect the Eye." This is by far the most complete account of the subject and of its literature that has yet appeared.

Dr. A. Fick's chapters on the "Hygiene of the Eye" have reached us incomplete, and we defer our review of them until a later day.

It is only proper to say that the *Handbuch* is published by the well-known house of Wilhelm Engelmann, in Leipzig, who also brought out the first edition, and that the subscription price is only two marks each part.

CASEY A. WOOD.

THE EMPLOYMENT OF SOLUTIONS OF TOLUIDIN-BLUE AS COLLYRIA, AND AS A STAIN FOR CORNEAL ABRASIONS AND ULCERS.—(Clarence A. Veasey, A.M., M.D., Philadelphia, Pa., the *Phila. Med. Journal*, August 13, 1898.)

This compound is a member of the aniline group closely related to methylene blue; it appears as a bluish crystalline powder, readily soluble in water or alcohol, forming a dark blue solution. Dr. Veasey has been using the solution in strengths varying from 1.50 to 1.10,000 as a collyrium in most of the inflammatory cases which he has encountered in dispensary service during the past six months, and has been favorably impressed with its action.

No irritation or stinging was observed when the stronger solutions were used, but a solution of 1-1,000 seemed to be just as efficient as a stronger one, and did not stain the surrounding skin so deeply. He has been in the habit of flushing the conjunctival sac with boric acid solution so as to get rid of accumulated secretion, and then to use the solution of toluidin-blue as frequently as other collyria would be employed under similar circumstances.

The stain has seemed to hasten materially the healing of sluggish corneal ulcers, and to cause marked diminution of the discharge in conjunctivitis, especially in the acute contagious and pneumococcus varieties in which the discharge is usually so abundant. It has also been employed with benefit in purulent dacryocystitis, the formation of pus soon ceasing under its use, providing there be no necrosed bone present. The discoloration upon the surrounding skin and upon the fingers is readily wiped away with a moist pledget of absorbent cotton.

The stain has a similar action upon corneal abrasions to that of fluorescin. Corneal abrasions and ulcers are at once stained and dark blue, without any discoloration of the remainder of the cornea; and the reparative process is hastened by its use.

NEWS ITEMS.

*Personals and items of interest should be sent to
Dr. Frank Allport, 92 State St., Chicago.*

DR. O. D. HAMLIN, Oakland, has been elected physician to the Deaf and Dumb and Blind Institute at Berkeley, Cal.

DR. WILLIAM DUDLEY HALL, of Boston, has recently been quite ill with pneumonia. We understand that he is improving, and hope that he may soon be at his business again.

DR. MANUEL URIBE TRONCOSO, editor of the *Anales de Oftalmologia*, announces the removal of his office and residence to No. 19, Calle de Mesones, City of Mexico.

DR. BURTON K. CHANCE has been appointed assistant surgeon, and Dr. Walter Blair Weidler resident surgeon, to the Wills Eye Hospital of Philadelphia.

DR. GUILLERY, of Cologne, in experiments concerning the amblyopia of strabismus cases, concludes: That the theory of amblyopia from disuse is untenable, and that the causes of amblyopia in strabismic eyes are manifold, and cannot be satisfactorily explained from any one standpoint.

DR. LUDWIG BACH, of Wurzburg, in some experiments on antisepsis or asepsis in operations on the eyeball, comes to the following conclusions: That much more is accomplished by mechanical cleansing with irrigation than by mere irrigation. That antiseptic solutions of sufficient strength to destroy bacteria are so irritating that their use must be advised against.

DR. JULIUS WOLFF, of Cologne, after a study of myopia of nine degrees or more, and with secondary changes and more or less diminished vision, found about ten per cent of the patients whose parents were related.

DR. WALTER ALBRAND, of Berlin, concludes, after an observation of two hundred and ninety-five cataract operations, in Schölers' Berlin Clinic, that because of a series of cases, which seemed to accompany the simple extraction, of severe iridocyclitis with hypopyon, occurring in a period of several months, without infection of the corneal wound, and from eight to fourteen days after the operation, the tendency has been to return to extraction with iridectomy.

DR. M. STRAUB, of Amsterdam, after a statistical study of one hundred and fifty-nine cases of congenital amblyopia, found 37 per cent with strabismus, 62 per cent lacking binocular vision (including strabismus), 60 per cent of anisometropia, and 17 per cent of isometropia, having binocular vision, concludes: That because of the number of cases (17 per cent) of amblyopia with binocular vision and equal refraction, the explanation of amblyopia from disuse fails, and a primary defect must be assumed as a cause of the amblyopia. After studying the hypermetropia of these cases, he asks the question, Why is it that a congenitally amblyopic eye in the larger majority of cases is hypermetropic? He answers it by saying that such an eye retains the congenital refraction, the normal hypermetropia of infancy, because it does not develop into emmetropia as it does in the healthy eye.

AMONGST the ophthalmological papers which were presented to the New York State Medical Association, held in the Academy of Medicine, New York City, October 24th, 25th, and 26th, were the following:

"Operative Treatment of High Myopia by Removal of the Crystalline Lens," by Dr. Charles Stedman Bull, of New York City; "Eye Complications in Typhoid Fever," by Dr. A. A. Hubble, of Buffalo, New York; "The Etiology Relation of Autoinfection and Autointoxication to Eye Diseases," by Dr. A. A. Hubble, of Buffalo, New York.

AN OINTMENT FOR GRANULAR CONJUNCTIVITIS.—Bloebaum (*Deutsche Medizinal-Zeitung*, January 23d) reports having observed decided benefit from the use of the following ointment in all stages of the disease:

R	Copper sulphate,	
	Salicylic acid,	
	Cocaine, aa	part 1
	Vaseline	parts 100

IN the new building of the Jefferson Medical College of Philadelphia a Laboratory of Ophthalmology has been established, where the senior students, in addition to their regular instruction in didactic and clinical ophthalmology, will have the opportunity of performing various laboratory exercises, particularly operations upon animals' eyes and microscopic work related to the pathology and bacteriology of the eye.

DR. W. B. PINEO, of Minneapolis, Minn., has just returned after a few weeks trip to Washington, Boston, New York, Philadelphia and Chicago. Dr. Pineo went to Washington primarily to take the 33d degree in Masonry. There are very few physicians who have this degree, and certainly very few ophthalmologists. We congratulate Dr. Pineo on the honor thus bestowed upon him.

DR. EMMERT, of Berne, Switzerland, reports favorably on the use of protargol in several hundred cases of eye disease. He uses it principally in the various forms of conjunctivitis and lachrymal troubles in the strength of from 1 to 3 per cent. In treating the various forms of conjunctivitis, he also uses a protargol ointment in the strength of from 5 to 20 per cent (20 to 80 grains to the ounce) made up with vaseline. He uses this ointment between the edges of the lids and smeared on their cutaneous surfaces, and over this applies cotton and a bandage. He bandages both eyes in this way at night, and in the daytime applies a bandage over one eye, alternating the eye with each successive day. He reports exceptionally good and rapid results from this treatment.

THE SEQUELÆ OF IRITIS.—Charles D. G. Hailes (*Edinburgh Medical Journal*, October), in an article entitled "The Clinical Aspects of Iritis," says: "The sequelæ of iritis, when treatment has been omitted or begun too late, are: (1) formation of posterior synechiæ binding down the margin of the iritis, so that the mobility of the pupil is interfered with; (2) occlusion of the pupil, or filling in of the pupillary space with membrane formed from the inflammatory exudates, causing permanent dimness of vision, but if incomplete, dangerous; (3) exclusion of the pupil, with iris bombé, not necessarily causing dimness of vision, if the pupillary area be free, but interfering with the escape of fluid into the canal of Schlemm, giving rise to excess of tension, and destructive glaucoma is always to be feared as a further complication; (4) total posterior synechiæ, with cyclitis, is always present, followed by disorganization of the globe."

IN the *Medical News* for October 21st is an interesting article by Dr. William H. Poole, of Detroit, entitled "Beta-Eucain as an Anæsthetic in Eye, Nose, and Throat Work." Dr. Poole generally uses a two per cent distilled watery solution in eye work. He reaches the following conclusions:

1. Eucain is decidedly less toxic than cocain, therefore superior to it.
 2. Its aqueous solutions keep well and can be sterilized by boiling without destroying the activity of the drug.
 3. It produces anæsthesia equally well and sometimes better than cocain.
 4. It is superior to cocain in that it does not cause heart depression or other unpleasant effects.
 5. It does not cause mydriasis or disturbances of accommodation, which is an advantage in some cases.
 6. It is less dangerous to the cornea than cocain, inasmuch as it does not cause desquamation of the superficial epithelium.
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DR. S. J. JONES of Chicago has inaugurated a crusade against unnecessary noise in the city, a work which we trust may be crowned with complete success. There is no question that the unnecessary noises in the city constitute a menace to health and shorten life in many instances. The railroads have promised to co-operate by abating the ringing of bells and blowing of whistles as far as possible in the conduct of their traffic. We trust the street-car lines will also be brought into the movement, and among other things, that the conductor who blows a shrill whistle in the ear of a passenger sitting at the end of the seat may be treated with the rigor he deserves. The carting of building iron through the streets, the cries of hucksters and of newsboys, the tooting of advertising bands, and the village-like processions which congest the streets, creating endless turmoil, should be relegated to the small towns, or some other limbo. In this connection we would like to call attention to the elevated roads, which, for unearthly screeching and creaking as they turn the corners or make stations easily occupy the front rank. Among these malefactors, the people who keep barking dogs or noisy cats should be severely dealt with, and everybody who is inconsiderate of his neighbor's comfort should be taught a salutary lesson. This is a large undertaking, but we believe that it can be accomplished under the able generalship of Dr. Jones.—*Chicago Medical Recorder*.

CATARACT.—The subject covered by Kalish's paper is summarized by him as follows: 1. Immature cataract is due to local conditions dependent on general systemic causes. 2. Senility is rarely a direct, but may be a predisposing, cause. 3. Fluids containing perverted aliments resulting from defective metabolism supplied to the lens through its nutritive stream may be considered an exciting cause. 4. Deficient blood-supply, thus reducing the quantity furnished, may be considered a contributing cause. The following conclusions may be drawn: 1. Immature cataract may be regarded as a largely preventable disease. 2. It may, by properly directed treatment, local and constitutional, be prevented, arrested, retarded, or cured. 3. The circulation of the blood must be regulated. 4. The faulty digestion may be rectified. 5. Constant supervision of the eye must be maintained by a competent ophthalmologist, that eye strain be relieved, and all changes in refraction be promptly remedied. 6. Treatment by conjoined manipulation and instillation should be instituted at the earliest possible moment. 7. Finally, if local and constitutional treatment should not provoke a favorable issue, they will establish a more nearly normal state of the ocular tissues, and if an operation be found necessary, this improved condition of the ocular structures will insure a larger degree of success.—Medical News, abstracted by the *Journal American Medical Association*.

WHERE LOVE IS INDEED BLIND—Ohio Wedding Ceremony in Which All Participants are Sightless.—At a wedding in Cleveland, recently, love was blind literally. Bride and groom were sightless, as were the justice of the peace who officiated, and the members of the orchestra which performed the Lohengrin wedding march, while none of the invited guests could see. To every blind person in Cleveland an invitation to be present had been extended. Even the beggar on the street corner was not excluded, and for one night he mingled with good society and was made happy.

The groom, William Moore, is a peddler of notions. His wife, who was Elizabeth Brown, was also engaged in the same occupation. Moore had sold goods to Mrs. Mary Deweese, and when she heard he desired to marry she offered to give him the wedding. She threw open the doors of her home to all the blind of the city, and notified all her friends to help her in furnishing a home for the young couple.

Mrs. Deweese spared no expense to make the event one which the afflicted blind will long remember. She is rich, and having a son who

is blind, her heart goes out in sympathy to all who are afflicted in the same way.

The wedding attracted much attention in the neighborhood. Scores of neighbors called just long enough to leave some little token of their sympathy.

The ceremony was unusually impressive. Justice Palmer spoke feelingly to his blind brethren present. The high and the low then sat down together to a meal which was very elaborate, after which the couple was driven home, escorted by a large number of the blind guests.

IN a very interesting letter from Dr. Henry D. Noyes, in the *Medical Record* for October 21, 1899, many items of interest are noted.

Dr. Noyes has recently returned from Europe, and while there attended the International Ophthalmological Congress, and visited many other points of interest. He inspected a sideroscope at the Clinic of Prof. Fuchs, in Vienna, which is so exactly and delicately constructed that the needle will respond to the presence in the eyeball of a particle of iron, which is no more in bulk than the head of an ordinary pin. He also saw the X-ray apparatus of Dr. Mackenzie Davidson, now of London, but formerly of Aberdeen, who avails himself of stereoscopic methods by which under an exposure of eight seconds the size and locality of a foreign body can be designated with absolute certainty. Dr. Davidson's method is set forth in the *British Medical Journal* for December 3, 1898, and January 1, 1899. Another notable achievement in ophthalmology was presented by Prof. Dimmick, of Innsbruck, who showed good photographs of the living fundus oculi, not only of the nerve, but also of the macular region. He has succeeded in obviating the damaging influence of the corneal reflex, which has been a stumbling block to all experimenters for thirty years.

Dr. Noyes saw a new demonstrating ophthalmoscope devised by Dr. Walther in Prof. Snellen's Clinic at Utrecht, capable of allowing an observation of the fundus with one-half of the pupil of the instrument, and of projecting emergent rays through the other half, and forming a picture of the fundus upon a receiving table. The instrument appears to be thoroughly clear and perfect in every way. Another apparatus of great interest was one that projects upon a screen the microscopic section of tissues exactly as they come from the stage of the microscope. The apparatus costs about five hundred dollars, and one of them should be owned by every progressive medical college in this country. So far they

are principally used by Fuchs of Vienna and Dor of Utrecht. The instrument is made by Zeiss.

Mr. Priestly Smith read a paper on Convergent Strabismus, of which Dr. Noyes speaks most highly. A point which he conspicuously brought out was the urgency of dealing with strabismus at a very early age, that the cerebral function of binocular vision may be duly educated. It is this which forms the barrier to success by usual modes of treatment when the squinting subjects have reached the age of seven or more years. Mr. Smith would employ glasses as early as they can be worn on the face, and would operate under two years of age.

Dr. Noyes also speaks of an improvement in artificial eyes devised by Prof. Snellen. They were made by Muller of Wiesbaden, Germany. The modification consists in laying a cover upon the back of the shell which may be flat or concave, and in some instances it is modeled after a plaster cast of the artificial cavity. Weight is not noticeably increased, and the advantage gained is a great improvement in appearance and the diminished tendency to unpleasant catarrhal secretions. Dr. Noyes feels that these shells may do away with the trend toward Mules' Operation.

THE following is a letter addressed to the editors of the Ophthalmological Section of the American Medical Association, and members of the Section :

My Dear Doctor,—For some years past much of the value of the contributions to the scientific session of the Section has been lost owing to large number of papers presented, making it necessary to rush through the program and to shut off much valuable discussion. At the meeting in Columbus, the executive committee reported the following resolutions, which were unanimously adopted by the Section :

"It is the decision of the executive committee that the number of papers to be read at the meeting to be held in 1900 be limited to forty, of which fifteen are to be on invitation by the chairman, and twenty-five to be accepted from volunteers. These are to be limited to fifteen minutes each.

"Three addresses by special invitation may be obtained, at the discretion of the officers, from within or without the Association.

"Papers are to be accepted in the order of their reception and at the discretion of the executive committee.

"Abstracts of all papers must be sent to the secretary before May 1, 1900.

"Discussions are to be limited to five minutes each, and no person shall speak more than once in the same debate.

"Due notice of this will be printed in the journal of the association, which will be considered the official notice for the volunteer papers."

Owing to the large number of ophthalmologists affiliated with the A. M. A., any and all of whom are competent to prepare papers which would be of value to the ophthalmic world, and would be gratefully received by our members, it will be necessary for those who desire to contribute volunteer papers to make arrangements with the officers *at once*, so that place may be reserved for them on the program. Positively no exceptions to the rules above adopted will be allowed, so it is earnestly requested that, if you wish to contribute to the scientific program at our next meeting, you will write immediately to the secretary, Dr. C. F. Clark, 188 East State Street, Columbus, O., stating, if possible, the title of your proposed paper. We remain,

Yours very sincerely,

C. F. CLARK, Secretary.

H. V. WÜRDEMANN, Chairman.

A DANGEROUS EXPERIMENT.—The *British Medical Journal* has an account of an operation for cataract performed upon a lioness three years old, by Professor Gustavo Pisenti, of the University of Perugia. The animal was placed in a suitable cage in the middle of the menagerie, and the first difficulty was the administration of the anæsthetic. The intervals between the bars of the cage were filled up with cotton wool, and a large packet of gauze impregnated with chloroform was placed in the cage, the door of which was then closed with a shutter. In about a quarter of an hour a reconnoissance was cautiously made, and the patient was seen lying stretched out and apparently in a condition of deep coma. She was then dragged out of the cage, and bound and gagged. She was then placed on a table, but before the operation could be begun she suddenly awoke and struggled violently, rolling on the floor, where the medical men, "with admirable coolness, but not without intense emotion, which might be seen in their countenances," held her down while the animal's head was wrapped in a towel steeped in sulphuric ether. The lioness, however, managed to free herself from the gag and partly from her bonds, and gave a roar which made the majority of the spectators beat a hasty retreat. But the ether overcame her, and Professor Pisenti, with great pluck, dragged her into the cage again, where the anæsthetic *coup*

de grace was given by means of another packet of gauze steeped in chloroform. The beast's head was pulled out through the door of the cage, and securely held in position. Professor Pisenti then operated with brilliant success.

THE TREATMENT OF HYPOPYON KERATITIS.—Dr. Eduard Zinn finds that Saemisch's method of emptying the anterior chamber in hypopyon is almost always followed by more or less harmful sequelæ, such as adhesions of the iris with the operation wound, secondary glaucoma, etc., and has for the past few years (*Wiener klinische Wochenschrift*, No. 9, 1899,) resorted to the following procedures: (1) Small ulcers not yet complicated by hypopyon are always cauterized, as far as the yellow infiltration extends, with a fine-pointed galvano-cautery attachment. If the hypopyon is small, not more than 2.2mm. high, nothing further is done. According to experience resorption of this small exudate take place during the further treatment of the ulcer. If the ulcer is broad and the hypopyon large, extending to the middle of the chamber or farther, the ulcer is freely cauterized and its lowest portion burned until the base is perforated. By rubbing or stroking with a Daviel spoon, the pus is usually evacuated from the chamber. The small quantity of pus remaining behind will be absorbed. Only in exceptional cases is a wound otherwise made, and then only with a curved lance, and at the lower sclero-corneal margin. (2) Instillation of atropine or scopolamine two or four times daily. (3) The eye is immediately covered with a Fuchs protecting shield. The patients may walk about. They should have nutritious diet. (4) Every two hours, by night also, the shield is removed, and sublimate vaseline (1:5,000) is rubbed into the conjunctival sac with a cotton tampon, and the shield immediately replaced. (5) The cornea is dusted lightly with xeroform three to six times a day. (6) When blennorrhœa of the lachrymal sac coexists, the sac is emptied by compression, and the pus removed with a tampon dipped in sublimate before the salve is applied. Xeroform emulsion (xeroform, 10; glycerine, distilled water, aa 50,) may be injected into the lachrymal duct two or four times a day. (7) Should the ulcer show a tendency to progress, which is seldom the case, the affected area is cauterized.—*New York Medical Record*.

AMBLYOPIA FROM HEMORRHAGE.—Holden has experimentally investigated the blindness observed after profuse hemorrhage, which has been accounted for variously. He operated on two healthy dogs and later examined the eyes microscopically. The pathologic conditions

were edema of the nerve-fibers and ganglion-cell layers of the retina, and some ganglion-cells beginning to show signs of degeneration. This will explain the ordinary cases of amblyopia following hemorrhage. In those unusual ones in which the sight disturbance takes the form of a central scotoma, while the ophthalmoscopic changes indicate retrobulbar neuritis, some special explanation is required which can not be given except after pathologic investigation of each particular case. He also investigated the suddenly developing amblyopia which has been observed after ingestion of methyl alcohol, and finds that it comes under the same category, as due to the nutritive disturbances in the ganglion cells of the retina.—*Archives of Ophthalmology*.

TRACHOMA.—Ziem, discussing the causation of trachoma, holds some views on climatic or telluric conditions, such as excessive heat and sunshine; dust and vapor, directly affecting the eye; mold, in malarial districts especially; swamp air, affecting the whole respiratory system through the nose, the conjunctiva becoming affected either by continuity or vascular connection; and by means of some agent entering the digestive tract, possibly in the drinking water, so that it is carried to the eye through the circulation. Each of these causes is discussed separately. He thinks that the intimate connection between trachoma and nasal catarrh is established, and this explains certain peculiarities in its manifestation better than other theories. These views affect his treatment of the disease, and he has made it rather dietetic and hygienic, even when local scarification is carried on. He believes that much can be done by proper measures of public hygiene, drainage, ventilation, foresting, etc.—*Journal of American Medical Association*.

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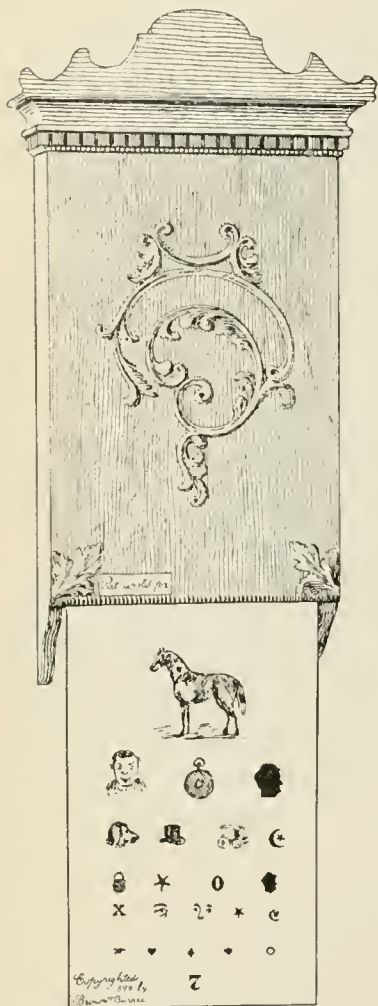
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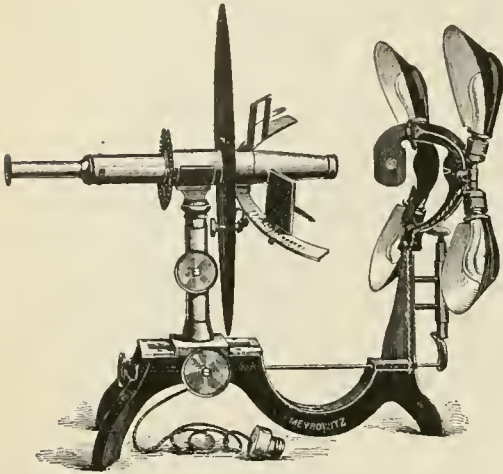
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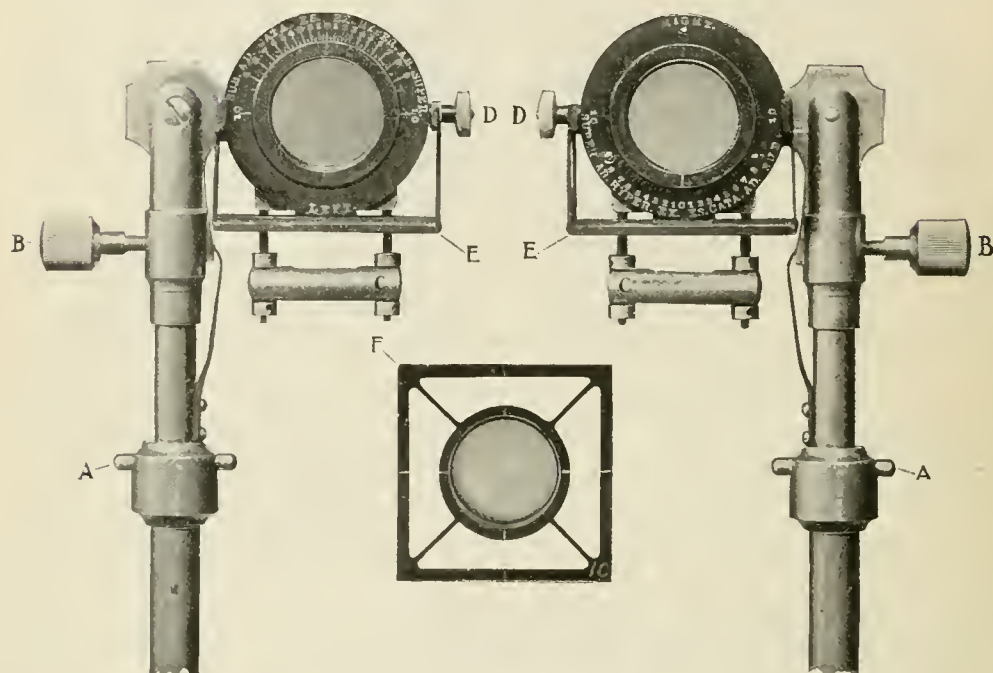
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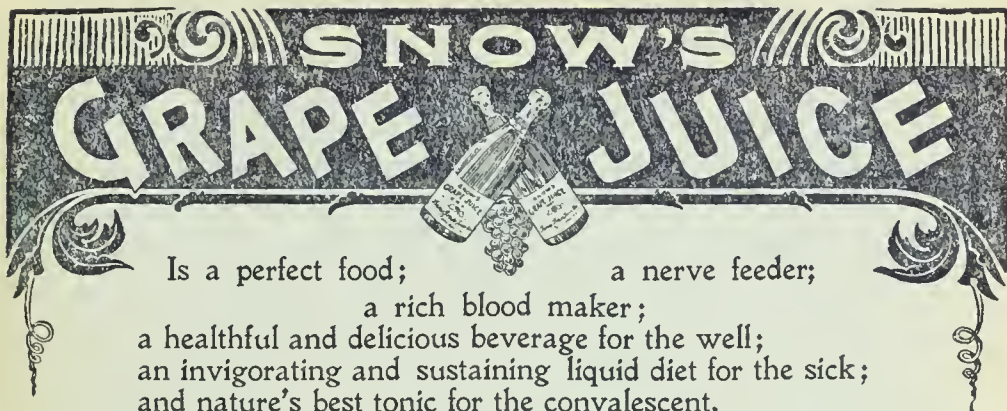
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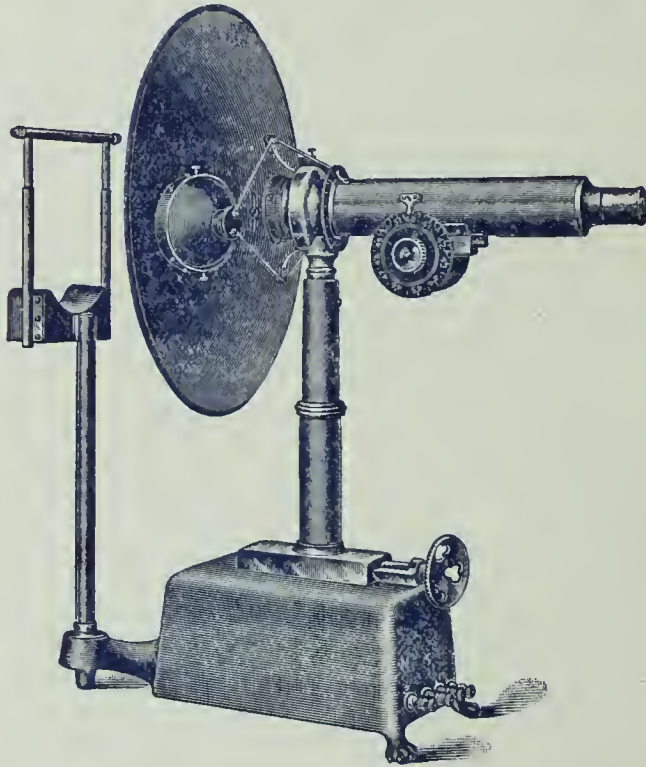
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